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DEVOTED TO

MEDICINE, SURGERY, AND THE COLLATERAL SCIENCES.

VOLUME III.

1874.

EDITED BY

ARTHUR B. STOUT, M. D.,
Professor of Principles and Practice of Surgery, Medical Department of University of California.

"Nunquam aliud natura, aliud sapientia dicit."

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THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR JANUARY, 1874.

Surgery.

Report of Cases of Incarcerated Hernia—Operation—Recovery.

BY H. H. TOLAND, M. D., PROFESSOR CLINICAL SURGERY MEDICAL DEPARTMENT UNIVERSITY OF CALIFORNIA.

A tumor of this description is generally easily diagnosed, and the character of the contents can be ascertained by a careful examination; but when an incarcerated omental hernia is complicated with Hydrocele, it is difficult, if not impossible, to form a correct diagnosis.

CASE 1.—A child about six years old was brought to San Francisco six years since by his father, with an enlargement of the left side of the scrotum. I ascertained by the use of the exploring needle that it was formed in part, at least, by serum; but in consequence of the absence of fluctuation at the superior extremity of the tumor, I concluded to allow the serum to accumulate before performing an operation for permanent relief. Chloroform was administered by Prof. O'Neil, an incision was made

with a lancet, and the serum soon escaped; then a more solid substance protruded, which was caught by a pair of artery forceps and drawn through the opening, until at least a foot in length and half an inch in width was removed, when the sac was empty; it was separated from its attachment with scissors. The wound being small, it was closed by a strip of adhesive plaster; compress and bandage were then applied and the patient was kept in a recumbent position for a week. At the expiration of that time the wound was healed and no evidence of disease was visible. He was taken home, and some months later his father called to say that his son was perfectly well.

CASE 2.—June 1st, 1870, a Californian from Spanishtown came to my office, with an enlargement of the right side of the scrotum; fluctuation was distinct at the lower extremity of the tumor, but not above. Consequently I made an incision about an inch long to remove the serum and to enable me to ascertain the true character of the difficulty. After the serum escaped, a portion of the omentum protruded, and a large quantity was removed by the aid of the forceps. After the scrotum was emptied, as in the first case, it was detached, and the wound dressed as described above, and with a similar result.

CASE 3.—Mr. A. S., an old resident and highly-respected citizen of Dalles, Oregon, visited San Francisco in June, 1871, and consulted me in reference to a case of scrotal hernia of the right side and of long standing, which had attained an enormous size. Upon making a careful examination, I found that the sac contained both intestine and omentum. The former was reducible, but the latter had been incarcerated for eight or ten years. After being apprised of his condition by both Dr. Holland and myself, he replied that he had visited San Francisco for the express purpose of having it removed, and would never return without submitting to an operation. Being encouraged by the result of the former cases, I consented to operate. On the 10th day of June, 1871, assisted by Drs. Holland, O'Neil, Charles Toland and my office students,

chloroform was administered and the intestine reduced; its escape from the cavity was prevented by Dr. Holland. An incision was then made the entire length of the tumor, by which the contents were exposed, which consisted of a small quantity of serum and a large amount of omentum, which from pressure was considerably indurated and changed in appearance. After breaking up the adhesions, a strong silk ligature was applied very firmly and as high up as possible; then the tumor was removed about an inch below the ligature. A compress and bandage were then applied over the internal ring and inguinal canal. Provision was then made for proper drainage. The wound was closed by the interrupted silver suture and the water dressing applied. After the third day the wound suppurated freely. The ligature separated on the sixth, when he was allowed stimulants in consequence of the inactivity of the liver, which resulted from their abstraction, after being used habitually for many years. A truss was applied so soon as he could leave his bed, and in fifteen days, although the wound was not entirely healed, he left for Oregon and is now perfectly well.

In these cases the result was entirely satisfactory, but I regret that I cannot say as much for the operation performed for the radical cure of reducible hernia. Many of these operations fail to obliterate the opening through which the contents escape. In some cases the peritoneal inflammation which follows is sufficiently violent to destroy life.

Occasionally, either from inexperience or carelessness, the spermatic cord is included in the ligatures, and then the testicle is destroyed.

When the opening in the abdominal parieties is so large that the contents cannot be retained by a good truss, I have succeeded in diminishing it by invaginating the scrotum with two fingers and keeping it in that position by two or three strong ligatures passed through the skin and subcutaneous cellular tissue, until they come in contact with the fingers and are brought out through the skin about

an inch below. A roll of lint should then be placed between the ends of the ligatures and secured by tying them firmly. They should be allowed to remain from eight to twelve days, which is long enough to produce adhesions sufficient to diminish the size of the opening.

Cystitis.

BY I. R. WOODSON, M. D., KANSAS CITY.

Nearly all of the profession who have had much experience in the treatment of diseases of the genito-urinary organs will remember the extreme difficulty they have had to control the various forms of cystitis. True, in a majority of cases, we can quite readily control the acute forms of the affection; but how often have we been baffled in our efforts to permanently cure the chronic form? We have all tried, to the disgust and discouragement of ourselves and our patients, all manner of diuretics, anodynes and sedatives, and antacids, and how often our treatment has amounted to simply *nil!* Such was my own experience.

It has been my good fortune to encounter many cases during the past two years. It is not my intention to enter into a discussion of the pathology of the disease nor its causes; they are well known to the profession. My point is that cystitis, from almost any cause, is best treated by heroic injections, and I am persuaded by no hasty conclusions, but by actual experience. I do not contend that cystitis, induced by the presence of a stone or a mal-position of the uterus, could be so relieved, but such cases as are cystitis *per se*. And I do not think it necessary to go to the extreme of establishing an artificial vesico-vaginal fistula to enable the urine and injections to escape, as has been advised and practiced by some of our learned cotemporaries. We must bear in mind that the disease is an inflammation of the mucous membrane, and is amenable to the same treatment as like diseases in other localities I think that the dangers incurred in the use of heroic injections into the bladder have been greatly overrated. Such is my conclusion after a thorough trial. I will cite a few cases out of the many I have treated:

Case 1.—C. F. R——, aged 28, had contracted gonorrhœa some two years before he applied to me. According to his account, he had a case of acute cystitis soon after contracting the gonorrhœa, which was partially relieved by his attending physician. He had experienced more or less pain and frequency of micturition ever since. After a thorough examination with the sound, and the usual means of diagnosis, I found he had inflammation of the cystic neck and *bas fond*. I used to commence with :

℞—Argenti nitratis..... gr. x.
Ext. Belladonnæ..... ..... gr. x.
Aquæ destillatæ..... ℥ i.

Throwing the whole quantity into the bladder by means of the catheter and syringe. Violent pain of course ensued, the patient suffering considerably for several hours ; but the next day he expressed himself as feeling much better. I used the above injection twice a week and then slightly diminished the strength. He was entirely relieved in four weeks and has never been troubled since. I allowed him to pass the injection in about three minutes. I of course drew off the urine before using the injection.

Case 2.—H. W——, belonged to the *demi monde*. Here was a case plainly induced by excessive coition, and it was really a distressing case, presenting all the painful symptoms of the disease. I used, in this case, an injection consisting of tinct. iodinii ʒ i., aquæ destillatæ ʒ vii. There was, of course, violent burning and painful micturition, and indignation on the part of my patient; but the next day she was so much better that she expressed a desire to have the injection repeated, which I did not do for three days. I then increased the tincture of iodine to two drachms, which gave less pain than the one did before. After that I alternated the iodine with nitrate of silver and belladonna every three days. She recovered in less than five weeks, being much relieved from the beginning of treatment.

I will state here, that I had to administer an anodyne in both cases mentioned above, to control the pain incident to the injection.

Case 3.—Charles A——, engineer, had been suffering with a disease of the bladder for several years ; micturates frequently. Urine, upon examination, was found to be mucopurulent. Micturition was variable in frequency, depending much upon the care he would take of himself.

Diagnosis : Inflammation, of long standing, of the whole mucous surface of the bladder.

Used first, acidi carbolici gr. ii., aquæ destillatæ ℥ i. This had less painful effect than I had looked for, and as I firmly believed that a decided impression upon the diseased surface was essential, I used, two days afterward, tinc. iodinii ʒ iss., aquæ ʒ viss. This made him fairly yell with pain, but I administered aṅ opiate, and after a few hours he was better.

This was my hardest case, and I worked at it two months before mastering it; but the long wished-for result came at last and he seemed to be entirely relieved.

I will not trespass on your space to relate any further cases. My experience in treating such affections by such means is limited to some ten or twelve cases, and they have all been apparently cured, and, I hope, permanently.

In conclusion, I will state that I did not confine my injections to the "pent-up Utica" of silver and iodine, but used nearly all the remedies we usually use as applications to diseased mucous membranes; and after my experience, I cannot see why we should afflict our poor patients with so many nauseous doses when the disease is so far away and can be so readily reached by the catheter and syringe. And I would also enter my hearty protest against the use of diuretics in these cases, which habit is so prevalent among some of our profession who ought to know better.—*Kansas City Medical Journal*, August, 1873.

Cases of Traumatic Malignant Onychia Successfully Treated by Means of Nitrate of Lead.

In the *Ippocratico*, Dr. D. Peruzzi has recorded a remarkable instance of the above, in the form of a letter addressed to Professor Vanzetti, who was the first in Italy to advocate the use of nitrate of lead in malignant onychia, and had been eminently successful in fourteen cases of the disease. Dr. Peruzzi's case was a very bad one; so bad, indeed, that amputation of the diseased part seemed the only possible procedure. It occurred in a youth of seventeen, of lymphatic constitution, who fourteen months previously had wounded the great toe of his right foot. The wound gradually extended and suppurated, loosening the nail to the root, and producing hemorrhage, which became more

and more frequent and abundant. The pain was most intense; sleep quite impossible; and the patient was finally reduced to a worn-out condition. All previous medicinal applications had failed. On May 14th, the loose extremity of the nail was cut off, and nitrate of lead sprinkled freely all over the diseased parts. A bit of rag was simply applied. Strong pain was felt, but speedily abated. A black, polished scar was produced and fell off at the end of six days. The parts healed beautifully. A second slight application of the substance was made with the object of hastening and ensuring a cure. Dr. Peruzzi's case is followed by the relation of three other instances of cure recorded by Drs. Verardini and Casati.—*Lancet.*

Resection at Hip-joint; Fracture of Femur.

Dr. F. H. Hamilton, at a recent meeting of the New York Pathological Society (*Medical Record*, August 1, 1873), presented the head, neck and trochanter major of a femur resected at Bellevue Hospital before the class, April 12th, 1873. The patient was a boy, æt. seven, who had morbus coxæ in its third stage. He was now progressing favorably toward recovery. The only point of special interest in the case was the fact that, while employing a slight amount of leverage to disarticulate the bone, the femur broke near its middle. He was surprised how little force was requisite to break the femur under these circumstances; and as he had not seen any allusion to this danger in the surgical treatises, he thought it important that he should call the attention of surgeons to the matter. The fracture was transverse, and under the support of pasteboard splints, it united speedily without deformity.

Dr. Sayre said this accident had happened in two cases while he was operating.—*Medical News and Library* for December.

Treatment of Chronic Disease of the Bladder by the Injection of Healthy Urine.

Dr. Clemens, of Frankfort, uses healthy urine containing the normal amount of uric acid, as an injection into the bladder in cases of catarrh. The organ should be first

cleaned from any fetid urine, and washed out by the injection of tepid water; a healthy, young subject is then got to pass urine into the syringe, which has been previously warmed, and then it is injected into the diseased bladder. The best results are obtained where the urine of healthy boys and adults is used on alternate occasions. In one instance, a single injection of healthy urine sufficed to allay spasm, and in others the injection, used twice or three times a day, produced a most beneficial result.—*The Clinic.*

DRESSING WITH MAGNESIA.—Dr. Ohleyer advocates, in *Allgemeine Med. Cent. Zeitung*, No. 47, 1873, the use of magnesia, which he has found very successful, in the dressing of certain ulcers, when fermentative processes retarded healing. Magnesia neutralizes the acids present, prevents the access of oxygen to the surface and protects the granulations. The author especially applies it to (1) Atonic ulcers; (2) Cases in which the skin is without epidermis and in which there is danger of suppuration; (3) Inflamed and painful sores; (4) Wounds which require to be stimulated or to be withdrawn from the influence of air, or in which suppuration should be diminished or modified. Dr. Ohleyer has also used magnesia with good results in erysipelas of the face, as an isolating substance.—*Lancet*, July 12th, 1873.

TREATMENT OF CHRONIC NASAL CATARRH.—Dr. Whittaker (*Clinic*, July 12th, 1873), advocates the treatment of certain cases of nasal catarrh by pressure. He does it for the same reason that the surgeon uses pressure to remove stricture of the urethra. The constriction is usually found in the inferior meatus. Bougies of different sizes and shapes are employed, as the particular case seems to indicate. His success in the five cases thus treated has been very gratifying. The suggestion is surely worth a trial, as by present methods, these cases are treated with most unsatisfactory results.—*Detroit Review of Medicine—Southern Medical Record.*

Institutes and Practice of Medicine.

The Treatment of Asthma.

The following extract is from a lecture by Dr. C. T. Williams, reported in the *Lancet:*

1. *Stimulant Anti-spasmodics.*—A certain number of asthmatics gain relief by sulphuric ether, by strong coffee, and even alcohol. One of the most recently introduced of this class is the nitrite of amyl, which, by acting as a violent cardiac stimulant, sometimes relieves the spasm.

2. *Sedative Anti-spasmodics.*—This is an almost endless class; and if the sufferer perseveres, he generally gets relief from one or more members of the group, which includes datura stramonium, tatula, belladonna, hyoscyamus, tobacco, lobelia, Indian hemp and others. With regard to stramonium, belladonna and henbane, their use was dictated, as is well known, by the experiments of Dr. C. J. B. Williams, who found that in animals poisoned by these drugs, the bronchial tubes were dilated and incapable of being excited by any stimulus, and they seem to have little effect on the bronchial muscles. I found far more satisfactory results follow the use of the extract of stramonium made from the seeds, in quarter-grain to half-grain doses, than in smoking the cigarettes of the leaves, which, however, have a high repute. Lobelia is a valuable agent when used in sufficiently large doses; but to do much good, it must be administered, not in doses of from twenty to thirty minims, as is often done, but a drachm at a time, and repeated every three or four hours until some effect is produced. Tobacco, when smoked, has a sedative influence, but when taken into the stomach is a very unsafe remedy, it being necessary to push it to the extent of vomiting before relief comes; and ofttimes alarming symptoms of failure of the circulation follow. Indian hemp has been used, and with a certain amount of success; but it occasionally gives rise to curious head-symptoms, and therefore requires careful watching.

Inhalations of various kinds and smoking the different kinds of cigarettes often do good, if the spasm be not very severe; but when this is the case, we must expect them to fail, as they generally do, from the great difficulty of introducing them into the system. It is then that hypodermic injections of morphia come in useful, and by inducing

slumber, relax the spasm. The dose should be from one-sixth to one-fourth of a grain, repeated from time to time, and their use is at once contra-indicated by any blueness of the face or signs of obstructed circulation.

In very obstinate cases you will find that sometimes all drugs fail, chiefly on account of the difficulty of introducing them into the system; and the fit gradually wears itself out, generally through the carbonic acid accumulating in the lungs and inducing anæsthesia of the mucous membrane, and thus relaxing the spasm.

I can testify highly to the benefits of chloroform inhalation in the worst cases, in many of which it has acted like a charm and sent the sufferer into a calm slumber, from which he has awoke free from dyspnœa. In others the relief is temporary and the spasm returns as severely as ever. The objections to the use of chloroform seem to be twofold. First, it sometimes, in small quantities, *i.e.*, less than one drachm, causes intermittence of the pulse; second, it cannot with safety be entrusted to the patients. The chloral was given in doses of from fifteen to twenty grains in an ounce of peppermint water every three or four hours. The effect, in almost every instance, was that the patients fell fast asleep after the first dose and slept in a recumbent posture for a few hours, which they had not been able to do for days and weeks. On awaking there was a tendency of the spasm to return, which was generally obviated by two or three repetitions of the large doses. The breathing gradually became quite free, except when considerable emphysema existed; and here the asthmatic spasm was removed and only the habitual dyspnœa remained. The doses of chloral were then reduced and gradually discontinued.

Having succeeded with the most troublesome form of asthma, I next tried the drug in cases where the attacks, though severe, are far from periodic, appearing at a fixed hour every night and completely disappearing every day. Here the chloral seemed still more successful, as a large evening dose generally afforded a good night's rest, and steady perseverance with the night draughts seemed to break the habit of the attacks and eventually to get rid of them altogether. After this I have tried chloral in most forms of spasmodic asthma, and it is not to be wondered at that it has become a favorite prescription in my wards.

In the twenty cases in which I have used it, speedy relief has been obtained in all. In two, this has only been temporary; in the other eighteen permanent. In three

cases where thescruple doses have been repeated several times, the patient complained of queer sensations in the head; and in one of these, a very obstinate case, where the chloral was continued for days, the patient complained of feeling muddled. Vomiting came on, which disappeared on the appearance of purpuric eruption on the legs. The drug was of course discontinued, and in a few hours the wheezing, which had ceased, returned. This was the only instance of bad effects following.—*Philadelphia Medical Reporter*.

Croton-Chloral Hydrat.

The profession and the public are chiefly indebted to Dr. Oscar Liebreich for the introduction of chloral hydrate; and this obligation is further increased by the addition of croton-chloral hydrat, which will doubtless prove an equally valuable therapeutic agent. It is of the greatest service in cases of nerve-pain. Every sufferer from neuralgia is anxious to obtain speedy relief from pain: this may be obtained by taking croton-chloral hydrat, and then the antecedent causes of the neuralgia may afterwards be inquired into and treated accordingly. The following cases are interesting, as showing the immediate relief from pain that this drug affords:

A. suffered from facial neuralgia of a most severe character; it affected her hearing and eyesight. She could not rest or take food. She took one grain of croton-chloral hydrat every hour. In three hours she was considerably better. After taking three more doses, she was entirely free from pain.

B. suffered much from facial neuralgia dependent on decayed teeth and had not been able to take food or sleep for three days. She was ordered croton-chloral hydrat in grain doses every hour and obtained great relief after two doses. Six doses removed the pain completely. She slept that night.

C. This patient suffered from concussion of the spine caused by a railway accident some years ago. She has had every variety of treatment for the pain she suffers in the spine and the nerves proceeding therefrom. She took potassium bromide, gr. xx, and croton-chloral hydrat, gr. i, three times a day, with marked relief and no bad symptoms.

E. This is a young dyspeptic and neuralgic patient and suffers greatly from dysmenorrhœa. She took two-grain doses when the paroxysms of pain came on, with marked relief.

F. has been under treatment for various neuralgiæ for some years. She has had, at one time or another, almost every external and internal therapeutic agent in the Pharmacopœia—strychnia, iron, quinine, ammonium chloride, aconite, belladonna, iodine, bromine, blisters, hypodermic injections, galvanism, together with baths and other hygienic appliances, including change of air. In this case, two-grain doses of croton-chloral hydrat every hour afforded more speedy relief from pain than any of the above remedies. After taking eight grains, she was almost free from pain.

In thirteen patients who have taken croton-chloral hydrat, not a single bad symptom has been observed. In grain doses, it relieves pain quickly, causes natural sleep, no subsequent headache or furred tongue. In several cases it acted as a gentle laxative.—BENSON BAKER in *British Medical Journal*, October 25—*Philadelphia Medical Times.*

Extraordinary Case of Passage of Hairs from the Bladder, giving rise to Irritation of the Bladder and Frequent Micturition.

BY JAMES A. SEWELL, M.D., L.R.C.S.E., QUEBEC.

Ann Vaughn, an orphan, at three years and nine months, was admitted into the Female Orphan Asylum of this city on the 18th of May, 1873. She is very backward of her speech and is of feeble intellect, though apparently she understands tolerably well what is said to her. Her habits are uncleanly, passing everything on the floor in a standing posture and in the presence of the Matron.

Before her admission she had been adopted by a very respectable family, who discovered shortly after that she was suffering from irritation of the bladder, passing water very frequently, with more or less pain.

On examining the urine, each discharge was found to contain a number of hairs varying from one to seven inches in length. Examined under the microscope, each hair

showed a well-defined bulb and all the characteristics of ordinary hair.

At this date she is still suffering from the above-mentioned irritation and passes about a dozen of these hairs every day. Generally, they are very fine and of a light color; occasionally, they are coarser and darker.

So far, my case, though an uncommon one, is not unique, as I find Coulson on Diseases of the Bladder reports three cases as having occurred in the practice of Sir Henry Sloane and one in that of another gentleman.

There is, however, another feature in this case, which, added to the facts above detailed, makes it really, so far as I can discover, perfectly unique. The child is constantly drawing similar hairs, from eight to ten inches long, from her mouth. These are frequently coated with bloody mucus. There is no calcareous matter attached to the hairs found in the urine. The fluid is of a specific gravity of 1018, and contains neither blood, pus nor mucus globules. I may add that I have discovered these hairs in the child's urine passed in my presence. I have never seen her draw any from her mouth, but some of the lady visitors have, and moreover, I can rely implicitly on the report of the Matron.

If you consider the case of sufficient interest, you will oblige me by inserting it in your journal.—*Canada Medical and Surgical Journal.*

Neuralgia of the Abdominal Plexus of the Sympathetic.

Dr. A. Seeligmuller, in the *British Medical Journal*, in a collection of observations on the pathology of the nervous system (Halle, 1873,) states that a man aged thirty-three, who had been long exposed to cold and wet while employed in some water-works and had afterwards worked in a white-lead manufactory, suffered from the following symptoms, which returned regularly every four weeks: His face became red and he had pain in one or other of the lower limbs. While these symptoms were present, he had a violent paroxysm of cough, ending in vomiting of mucus; this was followed by an urgent desire for defecation, attended with spasmodic pain in the rectum and in the whole of the hypochondriac region. The first discharges were normal; afterwards they presented thready masses of the

size of a goose-quill. After the stools, the pain extended to the back; and when it had reached the neck, the feeling of strangulation, vomiting and spasmodic deglutition were relieved. The patient then had a rigor; and the paroxysm ceased at the end of twelve hours, with an attack of vomiting, to be repeated on the third day. After this, there was an interval of four weeks, during which the man became rapidly convalescent and presented nothing abnormal on examination. Various plans of treatment only alleviated this condition for a short time. The patient found most relief from a prolonged course of treatment as for tænia and faradization of the large intestine, and at a later date from injection of morphia. The disorder remained essentially unchanged. Dr. Seeligmuller believes that the symptoms were due to neuralgia of the solar plexus or to a visceral neuralgia affecting some one or other of the abdominal plexus. He does not think that the case was one of lead-colic, because the patient had no symptoms while employed in the manufactory, and there was no lead-line on the gums.—*Medical and Surgical Reporter.*

Elimination of Mercury.

Drs. Mayencon and Bergeret, in a study of the action of mercury (*Journal de l' Anatomie*), found that when one centigramme of the bichloride was injected hypodermically into a dog, the metal was to be found in the urine during the following twenty-four hours; when a centigramme was administered during ten or twelve days, the urine contained mercury during the whole time and for four or five days afterwards. They failed to find it in the saliva, but did detect it in the spermatic fluid of an embosser. In a ptyalized nursing woman the milk contained as much as the saliva; and the authors detected the drug in the urine of a baby fed at the breast of a mercurialized female.

In a second series of experiments, rabbits were killed at various intervals after the injection of a solution of the bichloride, and their tissues examined. It was found that in half an hour the drug had permeated everywhere, but was most abundant in the liver and kidneys. In four days the mercury given in a single dose was all eliminated and could not be found in the tissues. By the continuous use of the metal it certainly accumulates and remains in the

system. Thus, neither the urine nor the blood of one of the investigators contained any of the metal forty-eight hours after the cessation of a mercurial course. Yet, on taking iodide of potassium, mercury reappeared in the urine and continued to be present for forty-eight hours.—*Medical Times.*

Cold Infusion of Green Coffee in Gout.

Dr. Monchaux communicates to *L'Abeille Médicale* his experience in the use of cold infusion of green coffee in the treatment of gout. He directs his patients to take a tablespoonful of green coffee, place it in a tumbler, half fill the latter with water at the temperature of the atmosphere, and allow it to stand for twenty-four hours. In the morning the liquid is to be swallowed, an equal quantity of water added and taken the following morning; thus the same quantity of coffee will serve for two doses. The liquid thus obtained has little savor; it is more or less distinctly green, according to the species of coffee employed. Dr. Monchaux does not explain the mode of action of the remedy upon the uric diathesis. He inclines to the belief that it acts against the effects of the disease rather than on the disease itself, and that, in order to prevent a recurrence of gout, it is only necessary to make a daily use of the remedy indicated by him. He observes that the remedy is an old one, and that, however difficult it may be to explain the precise action, the efficiency of the remedy is acknowledged. He had himself used it during three years, and with the result that his bi-annual attacks of gout had completely disappeared.—*The Doctor.*

Treatment of Diphtheria.

Dr. Lolli strongly recommends the following measures, having found them extremely efficacious in a great variety of cases: 1. Avoid cauterizing, except when gangrene occurs. 2. Do not have recourse to bleeding, purging or emetics unless you are forced to do so by exceptional symptoms. 3. Diet, according to appetite; but at all

events generous. 4. Do not interfere with the functions of the skin; or rather promote them by rest in bed, poultices, sinapisms, etc., and persevere until, from the general or local symptoms, it may be supposed that the morbid principle has been eliminated or destroyed. 5. Use the following mixture as a gargle, or apply with a camel's-hair pencil every second hour, or employ as an inhalation if the disease has reached the larynx:

℞ Lime-water, f℥iv to xij;
Solution of perchloride of iron, f℥ss to f℥ij;
Carbolic acid, gr. j to xx;
Honey of roses, f℥j.

Shake the bottle well. The mixture may be largely diluted with water or tea and given internally.—*The Lancet*, August 16th, 1873.

CARBOLIC ACID AND SULPHITE OF SODA IN SMALL-POX.—An article was published some time ago by Dr. Bessy, of Montreal, bringing the above most successful plan of treatment under the notice of the profession. Since then he has had several cases, all confirmatory of the beneficial action of this combination. He gives it in the proportion of one drop of carbolic acid to from 5 to 10 grs. of the sulphite, in a drachm of glycerine. The carbolic acid is first dissolved in the glycerine, forming a carbolate of glycerine, and to this is added the sulphite of soda. It is deserving of a more extended trial.

CHLORIDE OF POTASSIUM IN EPILEPSY.—Dr. Lander uses (*Scalpel*, Belgium,) chloride of potassium instead of bromide of potassium in epilepsy. He mentions the following advantages in the employment of the substance: It is more active, is but one-sixth of the cost and has not the secondary effects of the bromide. He begins with small doses, but has been able to continue the use of the substance for months without any inconvenience, in daily doses of from one drachm to a drachm and a half. According to Dr. Lander, bromide of potassium is transformed into the chloride in the stomach. This is, therefore, an additional reason for prescribing it at once in this latter form.—*Lancet*, July 12th, 1873.

TREATMENT OF DIPHTHERIA.—Dr. Kuhn, of Berlin, regards diphtheria as of fungus origin, and he endeavors "so to modify the nutrition of the mucus membranes" that they will be unfavorable to the growth of this fungus; this he proposes to do by the use of strong alkaline solutions. He gives fifteen to thirty grains daily of carbonate of potash to a child under three years, and so on in proportion to age.—*Medical and Surgical Reporter.*

COLD BATHS IN RHEUMATIC FEVER.—Dr. Sydney Ringer reports in the *Practitioner* a case of rheumatic fever successfully treated by means of cold baths and the application of large-sized ice-bags. The patient was a young girl about twenty-two years of age; the temperature was very high and the joints red and painful, but under the above treatment the temperature was soon lowered and great relief afforded the patient.

Gynecology and Diseases of Children.

Interesting Case of Albuminaria attending Pregnancy.

BY T. H. PINKERTON, M. D., OAKLAND, CALIFORNIA.

Was called to visit Mrs. A. R. M., November 3d, 1873, on account of an anasarcous condition which pervaded her entire body. On inquiry we learned that she was about seven and a half months gone in pregnancy. Being a very large and fleshy person naturally, the dropsical effusion greatly incommoded her in locomotion, and she complained of her feet and lower extremities particularly, together with great dispnœa and weight about the lower part of the abdomen. We suspected albuminaria at once, yet there was no cerebral disturbance or pain in the renal region. An examination of the urine revealed that its

sp. gr. was 1026 and acid in reaction, amount 32 oz. in twenty-four hours; that it was heavily laden with albumen. Her bowels were loose, having from three to six semi-liquid evacuations daily. We ordered her potass bi-tart, in cold water, as a drink. Also to take acid tannicum, given in a drachm of glycerine three times daily.

November 5th—Patient no better; urine 36 oz., sp. gr. 1022, acid.; albumen same as on first examination; ordered ten drops tinct. digitalis, with syr. scillæ every four hours, with a view to their action on the kidneys. Under this treatment she continued with no improvement in her symptoms until the 9th inst., when a severe attack of vomiting, with pain in the epigastrium, supervened, and continued through most of the night; the morning brought no change. Pulv. jalapæ ʒ ss. was ordered, to be repeated in three hours if the bowels were not moved, which, having the desired effect, the vomiting ceased, and we left our patient comparatively comfortable.

November 11th—The albumen not diminishing and her general condition remaining about the same, it was determined to call Dr. R. Beverly Cole in consultation.

The question of inducing premature delivery was fully discussed, but it was concluded to first advise a hot bath, continue the digitalis internally as well as apply an infusion of the same by means of cloths covered with oiled silk to the back, and also to alternate with the digitalis internally, acid benzoicum, gr., in glycerine ʒ ss., every six hours.

November 12th—Condition of patient about the same; urine, 36 oz., sp. gr. 1022, acid. Microscope revealing the presence of pus cells and granular tube casts; albumen three-fourths, (that is, on boiling and addition of acid three-fourths of the bulk of urine examined became solid). She complains of less sickness at the stomach; treatment continued.

November 13th—Sent for in haste and found her suffering from gastrodynia; examined urine; albumen same in quantity, 34 oz., sp. gr. 1028. Ordered pulv. jalapæ ʒ ss. potass bi-tart v., which acted as a cathartic, without relief;

directed her to have opii, gr. $\frac{1}{8}$. pot. nitr. gr. $\frac{1}{4}$. every hour; she was greatly relieved after second dose.

November 14th—General condition same; urine, 24 oz., acid, sp. gr. 1027, brown red in color, opaque, heavy white sediment; albumen four-fifths (4-5); spindle-shaped cells moderately numerous; flat cells abundant; pus cells moderate; blood cells, granular casts both straight and convoluted very abundant.

November 15th—Urine increased to 32 oz. and rather less blood cells; in other particulars unchanged. The patient, however, complains of constant nausea, and is growing decidedly weaker. Dr. Cole met me again—a further investigation developed that neither of the physical signs of a living child were present, and the patient states that she has not felt the movements of her child since Sunday, the 9th inst. In consideration of this fact, taken with her general condition, it was determined to induce "premature delivery," and a sponge tent was introduced to the cervical canal of the uterus at 10 o'clock A. M. At about 3 o'clock P. M., labor pain commenced, and continued at irregular intervals through the night.

November 16th—Pains continue more regular in their recurrence and character, gradually increasing in frequency and power until 11 o'clock A. M., when she was delivered of a child, bearing the evidences of having been dead for some days.

The patient having on several preceding occasions been exposed to the dangers of post-partum hemorrhage, we administered thirty drops of the Etherial Ext. of Ergot in brandy, and repeated the dose in fifteen minutes, which had the effect of superinducing contraction of the uterus at once, and there was no more loss of blood than in ordinary cases. This fact gave great comfort, as she had invariably in her previous labors flooded fearfully. Her condition continued satisfactorily throughout the day.

November 17th—Had quite a comfortable night; slept most of the time quietly. Urine increased to 40 oz. for the 24 hours, sp. gr. 1015, albumen much less.

November 18th—Had tolerably good night; general condition good, but complains of slight pain in the left ovary. Urine increased to 128 oz., sp. gr. 1012, acid, albumen one half ($\frac{1}{2}$) with some hyaline casts. Ordered warm fomentations over left ovary.

November 19th—Has pain still in the ovary with some nausea of the stomach. Urine, 54 oz., acid, sp. gr. 1020; opaque, reddish brown, albumen $\frac{1}{2}$, granular discs. Ordered potass bi-tart ʒ ss. in cold water, to be taken as a beverage during the 24 hours.

November 20th—Has less pain in the ovary; swelling in the feet and legs much less. Urine 48 oz., sp. gr. 1019, alkaline in reaction, albumen $\frac{2}{3}$, nausea gone, and general condition good.

November 21st—Pain in ovary much less; has a slight flow of fresh blood from the uterus; urine, 50 oz., alkaline, sp. gr. 1015; albumen one-half ($\frac{1}{2}$), light yellow in color; transparent casts straight; granular casts but few; pus cells a few; triple phosphates abundant.

November 23d to 30th—Steadily improving in all her symptoms. Daily average of urine voided, 64 oz. alkaline, sp. gr. 1018, and albumen nearly disappeared.

December 1st to 10th—Quantity of urine passed daily, 40 oz., acid in reaction, sp. gr. 1015. Only a trace of albumen remains; in every other respect the urine is perfectly normal; the dropsical or anasarcous condition has entirely disappeared—the patient recovering her natural size and appearance.

Debility being the greatest trouble with which she has to contend at this time, we ordered Elix. Quiniæ Ferri et Strych, in teaspoonful doses 3 times a day, after eating, with a small dose of Jalapæ and Pot Bi-tart pro-re nata, with a view to its action on the bowels.

December 15th—Patient entirely recovered and discharged.

Remarks—In the above report there are several points of interest and speculation quite noticeable; 1st, the excessive effusion into the cellular tissue; 2d, the enormous

quantity of albumen in the urine, four-fifths (4-5 ;) 3d, the presence of blood cells, of pus cells and casts, indicating rapid disorganization of the kidney; and 4th, the death of the fœtus.

Whilst it is no uncommon occurrence for albumen to appear in the urine of pregnant women, and, indeed, convulsions result from presence of urea, yet we are of the opinion that it is rare for so large a quantity as this case presented.

We also know that anasarca frequently occurs in these cases, but have never seen it so extensive as to involve every portion of the surface, even to the face and scalp.

The presence of blood and pus cells, together with casts, certainly is no part of the condition of a pregnant woman, even when dropsy and albuminaria are present, and strongly indicated a disposition to disorganization, at once alarming in itself, and tended largely to induce us to suspect permanent organic change.

The suspension of the movements of the fœtus in utero might be argued as a reason why premature delivery should not have been resorted to, as decomposition would, in a short time, have induced labor. From this opinion, however, we must dissent, for the reason that as the woman's blood was unquestionably charged with urea, it was desirable to relieve the pressure exerted by the gravid uterus upon the emulgent vessels and aorta as speedily as possible, and certainly the detention of a decomposing fœtus in the uterus, furnishing material for absorption, and hence exposing the patient to the additional danger of septicæmia, in our judgment would have been reprehensible.

Antidote to Mushroom Poisoning.—Experiments lately made with the active principle of mushroom (muscarine) pure agaricus muscarius show that its effect on the system is the reverse of that of atropine. It causes a great sensibility to light and increase of the pulse and seems in its action to promise the best remedy for belladonna poisoning, and *vice versa*. Its subcutaneous injection was used.

Notes on the Treatment of Puerperal Convulsions.

There is no complication which can occur in the lying-in chamber more alarming to the attendants than the occurrence of puerperal convulsions. The wildest emotions are exceedingly apt to be manifested, and it is towards the medical attendant that all eyes are turned for assistance, for it is upon his knowledge and the ability to put it into practice that the life of the woman depends. The general features of treatment, as practiced by some of the obstetricians of New York, are given below, and will not be uninteresting, we trust, to any reader who may be liable to be called to attend such cases.

The plan of treatment adopted by

PROF. T. GAILLARD THOMAS, OF NEW YORK,

Is essentially embraced in the following: When a toxæmic condition of the blood is recognized in the pregnant woman, from the presence of albumen in the urine, keep the mucous tract of the alimentary canal very active, prevent the woman from eating a large amount of animal food, and guard the skin against atmospherical changes in temperature. The *first* indication may be met by the use of saline cathartics, such as bitartrate of potassa and Rochelle salts. The *second* indication is met by keeping the woman as much as possible upon a vegetable and farinaceous diet, giving but a small amount of animal food; and the *third* indication is met by stimulating the skin once in twenty-four hours by hot-water or hot-air baths, followed by frictions with a rough towel, used by an *assistant*, until the skin is in a perfect glow, and causing the woman to wear flannel. Perhaps by these means further interference will be entirely avoided. In the worst forms of uræmic toxæmia premature delivery will be required, and it should be accomplished at the end of the eighth month, unless the life of the mother is seriously jeopardized previous to this time. The child will almost surely die if left to the end of the ninth month and the life of the mother is greatly risked by the same postponement.

Suppose the woman is at the end of the ninth month, or before, and has a convulsion. The indication is to stop the convulsions and not permit them to return. Get the kidneys to work as soon as possible, and deliver the woman as soon as can be done with safety to the mother and child.

If the condition of the woman is such as to warrant it,

draw blood. This is done for purely mechanical reasons, viz.: to diminish the tendency to rupture of cerebral vessels and the production of apoplexy. But if you have bled and another convulsion comes; place the woman under the influence of chloroform. Venesection and chloroform are the two means for stopping this kind of convulsions. Now bring on labor and remove the child as soon as you can do so safely; but you are not obliged to deliver immediately.

The patient, being under the influence of chloroform, if the os is closed the warm douche may be used, throwing a stream of warm water against the cervix for twenty or thirty minutes at a time, to favor the softening and dilatation. The process of dilatation may mostly be left to nature, and within six or eight hours the os may be found to be dilated to the extent of an inch and a half or two inches in diameter.

If the pains are of moderate severity, the case may be left to nature chiefly until dilatation has taken place sufficient to admit of the use of the forceps or a resort to version, and either of these operations will be performed according to the circumstances of the case. There is generally no hurry about the delivering, for the woman is under the influence of chloroform.

The pressure now being removed from the kidneys, keep the bowels as loose as you can without prostrating the patient; sustain the strength by nutritious material, give stimulants if the pulse begins to flag, and keep the patient perfectly quiet.

The essential features of the plan of treatment adopted by

PROF. EDMUND R. PEASLEE, OF NEW YORK,

Are as follows: The management of the puerperal condition can generally be so conducted as to prevent the occurrence of convulsions. If, upon examination of the urine, albumen is found present in quantities sufficient to give any apprehensions with regard to its toxæmic effect upon the blood, the first indication is to make the kidneys act. This may be done by the application of dry cups over the region of the kidneys; sometimes a plaster of some kind is sufficient; and very generally acetate of potash will produce sufficient diuresis, if other measures fail. If there is an œdematous condition of the extremities, a pretty sharp drastic purgative may be given and repeated consistent with the effect and general strength of the patient. By

the use of these means, no further trouble, generally, need be apprehended. If the case is sufficiently serious to demand the induction of premature labor, it should be performed as soon as the woman shows any symptoms of convulsions. If it becomes necessary to bring on premature labor, which is rarely the case if the woman is properly managed, it may be done by the use of the warm-water douche, sponge-tents and Barnes' dilators.

But we will suppose that the woman suddenly, in the progress of her pregnancy, has a convulsion. The first thing to be done is to place the woman under the influence of chloroform, for the purpose of preventing the further occurrence of convulsions. She may be held under its influence for almost any length of time, if it is nicely and carefully administered, and not carried to the extent of producing stertorous breathing.

If the veins about the face are full and turgid, it may be well to take a pint of blood by venesection, but I have not found it necessary to resort to this measure during the last fifteen years. It is done with the view of saving the brain —relieving the pressure upon the great nervous centres. Next, in every possible way, hurry up the labor.

If the os is closed, the warm douche, sponge-tents and Barnes' dilators may be used; but the great objection to their use is that too much time is consumed in effecting an entrance into the uterus. A more expeditious method of effecting an entrance into the cavity of the uterus than either sponge-tents or the dilators is mechanical dilatation by means of the hand. Introduce the whole hand into the vagina, press firmly and steadily with the tips of the fingers against the os, insinuate first one finger into the os and cervix, then another and another, until the entire hand can be introduced and complete dilatation accomplished. The dilatation being accomplished, sufficient delay may be made to determine what the labor-pain will accomplish. If the chloroform prevents the convulsions, sufficient delay may be made to permit the head to come down, so that it can be readily delivered with the forceps; but if, after dilatation, there is necessity for immediate delivery or there is any doubt with regard to the efficiency of the labor-pains while the hand is in the uterus, deliver by version—for there are even chances that the child will perish in either case, and the life of the mother is first to be regarded. After the child is born, chloroform is usually sufficient to prevent the occurrence of convulsions; but it may be assisted by the hypodermic injection of from five

to ten drops of Magendie's Solution. I would not advise the administration of more than one injection, and this may be used at any time before or after delivery, if the chloroform and venesection do not arrest their occurrence. The same remarks are applicable in case of a rigid os, in case of a labor at any part of the process in which the dilatation is not complete. The dilatation with the hand is much more expeditious than dilatation by any other means. The first principal in the management of a case of puerperal convulsions is to look for the safety of the mother. Get rid of the child as soon as possible, save it if possible, but at the same time do not risk the life of the mother.

PROF. A. L. LOOMIS, M.D., OF NEW YORK.

At a stated meeting of the New York Academy of Medicine, held April 3d, 1873, Prof. Alfred L. Loomis read a paper upon the treatment of acute uræmia. Reference was made in the course of the paper to the subject of puerperal eclampsia. The plan of treatment which was particularly recommended in the management of cases of acute uræmia was to produce diuresis by the use of an infusion of digitalis; and if convulsions appeared, to control them by the use of morphine administered hypodermically.

The Professor stated that he had treated one case of puerperal convulsions after this plan and the result was entirely satisfactory. Reference also was made to cases treated by the use of morphia administered hypodermically.

In the discussion upon the paper of Prof. Loomis, the following remarks were made upon the treatment of puerperal convulsions:

Dr. Anderson, ex President of the Academy, remarked that he believed "vent must be given somewhere." In one case which he treated by the use of ether inhalations, with only partial success in controlling the convulsions, he gave the patient grs. xx. of calomel, and followed it soon after with an injection of turpentine and soapsuds, and the result was an overflow of the bed and a complete subsidence of the convulsions. The results in this case were sufficiently satisfactory to warrant him in the repetition of the treatment whenever the opportunity presented itself.

Dr. Baxter remarked that he was heartily sick of the use of chloroform, and that he relied upon infusion of digitalis in ℥ ss. doses every two or three hours and blood-letting.

PROF. WHITE, OF BUFFALO.

Prof. White, of Buffalo Medical College, being present upon invitation, gave his views upon the subject of treatment of puerperal convulsions as follows: I am in favor of the use of opium, but I have never felt that it was important to give it hypodermically. My attention was particularly called to its use in a case where there was great œdema, immense distention of the abdomen, in which the anæsthetics pretty nearly controlled the convulsions, but it was deemed unwise to further continue their use. Opium was given in large doses by enema, with the most pleasing results. I believe that opium is beneficial, from the fact it relieves cerebral congestion. Since 1851, and more especially as I withheld the anæsthetics, have I been convinced that opium prevents cerebral congestion; hence has a tendency to prevent the return of the convulsions. But I can see no special advantage to be derived by giving it hypodermically. Again, I think it is important to unload. Calomel may be given perhaps, but I think that it is not as useful as some other remedy. Almost all cathartics are difficult of administration at this time. The cathartic which I prefer of all others is the croton oil. It is easily administered, is efficient, and safe if properly administered. Prepared with a little sugar and placed upon the root of the tongue, it is almost certain to operate quickly, fully and freely. Another benefit which I think arises from the use of croton oil as a cathartic is, that it irritates the mucous membrane of the entire intestinal canal, and in this way operates as a revulsive. This I regard as an important benefit. I formerly regarded the puerperal convulsion as something requiring blood-letting. I still think that there are cases of convulsions where the abstraction of blood is important. I would therefore still resort to blood-letting occasionally, and the indications are plain which would demand the employment of this measure. The larger proportion of women, however, I believe, will not require it. —*New York Medical Record.*

Determining the Size and Sex of the Fœtus in Utero.

In conclusion, let me mention that investigations have been carried out with a view to determine the size of the fœtus and also the sex of fœtus in utero. Ahfeld, of Leipsic, has attempted to ascertain the size of the child, in order

to calculate the period of gestation, and more especially to make out before labor if any disproportion exists between the fœtus and the genital passage. He pays special attention to the size of the head, the hardness of the bones which form it, and the condition of the sutures and fontanelles. The patient being placed on the back, with the thighs flexed, if the long axis of the uterus be from above down, the position of the fundus uteri is marked on the abdomen, and then one arm of Baudelocque's pelvimeter is guided by the finger along the vagina to the occiput of the child. The length from head to breech is thus ascertained, and by doubling this we have the entire length of the child. Ahfeld has collected the results of measurements made in two hundred and fifty cases and gives much interesting information. In one of the tables which he gives, the relation between the length of the child and the two transverse diameters of the head is recorded. So far as these investigations go they are very valuable.

The interesting fact that the sex of the child can in a large proportion of cases be ascertained by auscultation during pregnancy has also lately been made known. When the fœtal pulsations number 144 per minute, the child is probably a female; when they are 124 per minute, probably a male. It is said that a little variation from 124 upward and from 144 downward will not alter the diagnosis, provided auscultation be practiced towards the end of pregnancy. Steinbach was correct in forty-five out of fifty-seven cases which he examined, while Frankenhauser was right in all the fifty cases which he examined with a view to determine the sex of the child.

Dilatation of the Cervix Uteri in Dysmenorrhœa.

Dr. John Ball recommends the following method of procedure in cases of constricted cervix uteri. Having procured the thorough evacuation of the bowels of the patient, place her upon her back, with the hips near the edge of the bed, and when she is profoundly anæsthetized, introduce a three-bladed, self-retaining speculum; seize the os uteri with a double-hooked tenaculum, draw it down towards the vulva, and then introduce a metal bougie as large as the canal will admit, following it in rapid succession by others of larger size, until one is reached which

represents the size of the dilator. Then insert the dilator and stretch the cervix in every direction until it is enlarged sufficiently to admit a No. 16 bougie, which is all that is generally necessary. Then introduce a hollow gum-elastic uterine pessary of about that size, and retain it in position by a stem secured outside the vulva for about a week, in which time it has done its work and is ready to be removed. During this time the patient should be kept perfectly quiet and usually upon her back. Dr. Ball claims that the operation saves a great deal of time, causes much less constitutional disturbance than the use of tents, and is not only safer than the metrotome, but is free from some serious objections to the use of the latter, there being no resulting cicatrix to interfere with the dilatation of the parts, and the condition of the patient after an unsuccessful operation being no worse than before. He says that it relieves the constriction entirely, by breaking up all the adhesions, which are often firm and unyielding; that, acting as a derivative, it cures the hyperæmia of the cervix; and that, further, it establishes a radical change in the nutrition of the whole organ.

He details nine cases of stricture of the os and cervix, complicated with vaginismus, chronic endo-cervicitis, version, sterility, dysmenorrhœa, etc., in all of which very great relief or permanent restoration to health was effected by rapid and forcible dilatation. In a foot-note, the editor of the *New York Medical Journal* quotes Dr. Ellinger, of Stuttgart, as recommending the operation—1, in stricture of the cervical canal; 2, stenosis due to flections; 3, metrorrhagia in a flabby, swollen uterus, but without new growths; 4, retained catarrhal secretions; 5, for exploraation of the uterine cavity; 6, replacement of a flexed uterus; 7, sterility. Dr. Ellinger declares that he has never had reason to regret rapid dilatation, and urges it, where dilatation is justifiable at all, to the exclusion of all other methods.—*New York Medical Journal*, October, 1873.

DR. J. B. MATTISON, of Chester, New Jersey, in the *Medical and Surgical Reporter*, writes that salicine has proven in obstinate diarrhœa a valuable remedial agent in his hand. He administers it in either pill or powder, but prefers the latter for children, in the dose of half grain every four hours, when under two years old. For adults he advises the following formula: ℞. Salicine, ʒj.; make into twenty-four pills; two pills every twenty-four hours.

Ophthalmology and Otology.

Granulations of Ten Years' Standing, Complicated with Violent Blepharospasm, cured by Canthotomy.

BY N. J. MARTINACHE, M. D., SAN FRANCISCO, CALIFORNIA.

On the 14th of August, 1873, a gentleman nineteen years of age came to consult me about his eyes. He first told me that he had been sick for ten years, and that during this period of time he had vainly sought a cure, or even relief, from numerous physicians. With a firm hope of becoming well, he swallowed daily, for six months, the Li-po-taic beverages, but he was not cured. He then went to see an oculist of high reputation, who, after a glance at the case, said he would cure it in six weeks. True to say, the aforesaid oculist was skilled enough to keep his patient for six months without procuring him the slighest amelioration. The oculist then ordered him to take a trip to the mountains and breathe oxygen—the pabulum vitæ. The patient went to the country, but the cure did not come, and he concluded to try some other physician.

When he had finished the narration of his sufferings, he asked my opinion. His eyes were in the following condition: The tears were flowing freely, and when I say this, I must insist a little on this phenomenon, because I never before saw such an abundant lachrymation. Owing to the fact that the secretion of the glands was constantly washed off, the lashes were always wet through, like a camel-hair brush dipped in water. The lids and lashes had a natural position, but the eyes were almost entirely closed; on being asked to open them the patient positively said that he could not face any light, either daylight or gaslight, and that whenever he tried to do it he experienced terrible pains in the eye-balls, as if thousands of needles were pricked into them. This I first accepted as an exaggerated account, due to the nervousness of the patient, but when, having him turned toward the window, I tried to open his

eyes, I found that the simple touch of the finger caused an energetic contraction of the orbicularis, accompanied with a violent pain in the eye-ball. I had to repeat my attempts a number of times before I could catch a glance of the cornea and of the internal surface of the lids.

With the symptoms previously described, I expected to find the cornea deeply ulcerated, but it was not; and a pannus of the upper part of each cornea was the principal lesion noticeable. This pannus was inconsiderable and may be termed pannus tenuis. Several of the largest vessels reached the centre of the cornea ; the epithelium was exulcerated in different places, the cornea hazy, but there was not anywhere what might be termed an ulcer of the cornea.

The internal surface of the upper lids presented some granulations scattered here and there; they were so few in number that at different times I never could count more than ten to fifteen on each side. They were small, the largest of them not exceeding the size of a small pin's head; they were very superficial, I would say, under the epithelium; there were no granulations on the lower lids and the inferior part of the cornea was sound. One particularity which deserves special notice is this: The upper lids were but very slightly hypertrophied, and when it is remembered that the disease was of ten years' standing, it will undoubtedly look surprising, but it is in perfect concordance with the slight granular condition of the conjunctiva previously described.

When I had finished my examination, I was fully convinced that the source of all the trouble was in the spasmodic contraction of the orbicularis, and that the granulations and pannus of the cornea would disappear very rapidly as soon as the contractions were stopped. The best reason I had in favor of what I thought was. that the material lesions of the conjunctiva or cornea were really trifling as compared with the photophia lachrymation and the dreadful pains in the eye-balls. The patient informed me that the last treatment he had experienced,

which consisted in almost daily applications of strong solutions of nitrate of silver and sometimes of caustic itself, had very much increased his sufferings.

During ten years the treatment was directed against the granulations, only the spasmodic contractions were overlooked as a complication which would cease by itself when the granulations were cured.

As an answer to what my opinion was, I said: "This is a curable case and I hope that the treatment will not exceed one month or six weeks." The patient's father could not help expressing his doubt, because he had been promised and deceived for so many years; though after explaining how and why the treatment would be different from what it was before, he consented to the operation I intended to perform.

On the 15th of August, the patient being placed under the influence of chloroform, I made at the external canthus of the eye an incision of a little more than three lines in length, and comprising the whole thickness of the external commissure, the skin, the orbicularis muscle and the conjunctiva. I then placed three sutures, one at the extremity and one on the middle of each edge of the incision, to unite the skin and the mucous membrane. Six hours after the operation, I saw the patient, who was highly pleased with the immediate result; he could move his eyes without feeling any pain, and the lachrymation had ceased.

August 16th—The patient can bear some light.

August 17th—On the morning I took the sutures out, and the window-blind being open, the patient was invited to look at it. The thought of the light was dreadful to him, and placing his hands over his eyes, he at first looked between his fingers and finally removed the hand and faced the window. The surprise of the patient is not to be described, but will be understood when it is remembered that for ten years he had not been able to take a good look at anything; and if I add that he considered the result as a miracle, one will have an idea of his satisfaction.

August 18th—At my morning's visit I did not find the patient, who told me in the afternoon that he had been all around the city looking at everything, and the light did not hurt him at all, though he did not wear any spectacles.

August 20th—The lashes are now perfectly dry and the patient goes out every day without any discomfort.

August 25th—Commenced to treat the granulations two or three times a week.

September 8th—The patient is improving rapidly and expresses his satisfaction to everybody; the pannus of the cornea is visibly diminishing.

September 15th—One large vessel in the right eye, which reaches the centre of the cornea, is touched on the conjunctiva, at two millimeters from the edge of the cornea, with actual cautery.

September 20th—The vessel is now like a thin thread, and at the end of September the patient is entirely cured. The sight is now gaining every day and will continue to improve for some time.

This observation shows, in the most striking manner, how important it is in practice to seize the right indication; for no sooner is it fulfilled, than an improvement, and subsequently a cure, is accomplished. I wonder how it escaped the attention of all the physicians who were consulted.

The incision by which the external commissure was divided had not a horizontal direction, but was slightly curved, so as to prolong the curvature of the edge of the inferior lid; a very important point in this little operation being to preserve the natural declivity of the oculo-palpebral canal, by which the stream of tears is conducted to the lachrymal points. If the incision is made horizontally, as it is recommended, the tears fall out directly on the skin; the blepharospasm is cured, but at the expense of a serious deformity, which it is so easy to avoid by means of a curved incision.

It will naturally be asked, I suppose, what was the apparent result of an incision more than three lines long,

at a cosmetic point of view? Immediately after the operation the palpebral opening was much enlarged, but in the course of three weeks, the cicatricial retraction had reduced it visibly, and when the patient left me, the palpebral opening was of the ordinary size.

One word more. This operation is designated by authors: Operation of Blepharophimosis; Section of the External Commissure; Canthoplasty. I propose to call it Canthotomy, as this expression gives a better idea of the operation.

On Contagious Ophthalmia.

This subject is discussed by Mr. B. Carter in the last volume of the *St. George's Hospital Reports.* He shows that there are three forms of the disease: first, that in which it commences as blepharitis or inflammation in the ciliary follicles; secondly, where it begins as simple catarrahal or purulent conjunctivitis; and thirdly, a variety in which the disease commences with the formation of "follicular granulations." All these varieties are developed and fostered by bad hygienic conditions surrounding the patients, and are, if neglected, capable of being conveyed, by contact or through the medium of the atmosphere, from one person to another; and, if untreated, may lead to distortion of the eyelids and severe damage or even actual destruction of the eyeball. Mr. Carter specially warns against the evil effects of regarding cases as cured when only improved, as the disease will almost certainly be rekindled by any disturbing action. The point of Mr. Carter's remarks may be said to be the stress which he lays on the absolute necessity of establishing medical as well as lay inspection of schools and large public institutions, without which it is in vain to hope for a cessation of this hygienic scandal.—*Medical and Surgical Reporter.*

Spots on the Cornea.—A number of cases of this disfigurement were treated by Professor Anciaux, of Liege, "with wonderful success." His application is a weak solution of sulphate of cadmium in equal parts of mucilage of

acacia and Sydenham's laudanum. With this the spot is painted two or three times a day. After the application the patient should close the eye for a few minutes, that the solution be not washed away by the tears.—*Medical and Surgical Reporter.*

Editorial.

The New Year and "The Lancet."

The year 1873 is now no more, and we have entered upon a new year with all the responsibilities and duties which a twelve-month future entails. The WESTERN LANCET, which has just completed the second year of its existence, "still lives," and though yet young, is healthy, vigorous and growing, if not in size, in strength, favor and influence. It feels, in bidding adieu to the old year, that it should express its gratitude to its numerous friends for the hearty support they have given in the past, and ask a continuance of that favor, without which no journal can live. We are conscious that we have fallen far short of perfection, and that we have, and may yet, make many errors, but they have been errors of judgment and not of design; and if we have at times offended, we hope that that charity which is the character of a Christian people shall be extended to us, and that no feeling of rancor shall be nourished towards us even by those whem we may have wounded. Journalism is no royal road to favor, but fraught with trials, perplexities, annoyances and responsibilities; to be a faithful chronicler and frank commentator is to become despised by such as fall under the lash of the journal; and yet one of the great duties of journalism is to call attention to evil, where and when recognized, that correction of error or design shall be effected, in the one case, through the exercise of conscience, in the other, through the weight

and influence of public opinion. If, then, we have in anywise discharged this duty, although we may have reluctantly stung occasionally, we feel that we have done something towards that reform in our profession which has long been needed.

Entering as we now do upon our third volume, we shall, as in the past year, be guided in our editorial department by conscience and duty, "favoring none," "sparing none," but be at all times candid and open. Our original papers, under their several heads, will be of a superior order, and selections for reprint shall be of such character as to commend the LANCET to the reading element of the profession upon this and the Atlantic coast. Perhaps no journal extant has a larger list of exchanges, which furnishes a guarantee of our promise.

Arrangements have also been made for the translation of such articles in the various French and German journals as may be intrinsically valuable, so that, encouraged as we have been during 1873, we feel that, with the assurances which we now give, that our effort to establish a proper journal upon this coast will be seconded by the profession, and that we shall be enabled at the end of 1874 to say that perfect success is ours. And now, in conclusion, whilst we bid good-bye to the old year, we wish to all our patrons and the profession at large a "Happy New Year."

A Meritorious and Growing Institution.

Whilst it is the province and duty of journalists to criticise public institutions, and whilst these too frequently are vulnerable, it occurs once in a great while that justice and humanity demand that a word shall be said in support of a charity, when it is conducted with an eye single to the objects for which it has been organized and without reference to direct personal aggrandizement of its leading spirits. Of this character we verily believe is the "California

State Woman's Hospital," established in 1867, through the unaided efforts of Dr. John Scott, for the treatment of diseases peculiar to women.

In 1868 the institution was handed over, in a flourishing condition, to a Board of Trustees, when its organization was completed by the appointment of a Board of Consulting Physicians and Surgeons. In 1869, application was made for assistance to the State Legislature, from whom $2,500 was received, and, we have every reason to believe, judiciously expended. In 1871, the Legislature being satisfied with the conduct of the Hospital, increased its aid to $3,750, which is about $300 per month; which, with what has been derived from such patients as have been enabled to pay their own expenses, has been the only support the institution has received, and yet, at no time, we are informed, has a bed remained more than a few days unoccupied; indeed, many patients have been refused from want of accommodation. The number of beds has been eighteen, but the demand has been so great that the managers have arranged for and are now having an addition built, which will furnish some fourteen more beds, besides other rooms and greater conveniences for the executive conduct of the Hospital.

This institution, unlike any other on this coast, is devoted exclusively to the treatment of diseases of women, or rather diseases that are peculiar to women, such as uterine, and ovarian. As is well known, these diseases are generally chronic, and always tedious, in many cases involving months of careful treatment. We presume, therefore, that the register of the Woman's Hospital will not show so great a list of patients as other, but general hospitals; yet, when the nature of the diseases treated is considered, in addition to the fact stated that in the brief period of five years, this institution has been organized, incorporated, and grown to the capacity of thirty-two beds, with every prospect that two years more may make a further demand for room, we unhesitatingly say that its success is unprecedented within the range of our knowledge. The "Samaritan" Hospital, of London, a similar

institution, in which the same class of cases are treated, has now, after a well-spent life of many years, but thirty beds, and yet it has the names of Spencer Wells, Routh, and others equally distinguished among its corps of surgeons. We do not ascribe the success of the State Woman's Hospital wholly to the name of its Visiting Surgeon or its Board of Consultants; but rather to the need which exists for such an institution in our midst and the superiority of its management.

Another feature of this charity, which is very noticeable, is the scrupulous cleanliness observed and the spaciousness of its several wards; some 750 cubic feet of space being allotted to each (whether pay or charity) patient.

The location of the Hospital is not all we would wish, and this fact is appreciated as well by the surgeon in charge, and management, as by ourselves; yet it is in a part of the city which is not thickly built up, and consequently, for the present, at least, enjoys the advantage of pure air.

The time is not far distant, we opine, when the State will find it proper to view the State Woman's Hospital as one of its most important charities, and be relatively as munificent towards it as it is towards the several other charities which are under its fostering care.

Army and Navy.

A petition has recently been drawn by some of the leading lights of what purports to be the San Francisco County Medical Society, and circulated for the signatures of its members, it appearing that but few representatives of that august body were present at the time of its preparation. The petition being presented to us, we attached our name to it on the presumption that those who had drawn it or hoped to be affected by it, knew what they were engaged in; but we took the precaution to make

a synopsis of the paper, that we might at leisure examine it and arrive at some more mature idea of its object, etc.

On reflection, it seems to us that although the petition is drawn in what appears to be a spirit of general interest, it is specially in the interests of a few individuals located on this coast, and that, in either case, it will be as powerless, coming from a small society composed of regular and irregular practitioners, united and controlled in the interests of these few leading lights alluded to, as would a yawl-boat in the open sea be enabled to buffet with the waves and tempests and reach a safe harbor.

The paper reads as follows—after being addressed in what may be considered due form to the Senate and Representatives of the United States, in a lengthy preamble:

Resolved, That in the opinion of this Society, the rank of the medical officers of the Army should be fully equal to that of any other staff corps or of the Medical Corps of the Navy. Under existing laws this is not the case, and we respectfully urge upon our Senators and Representatives in Congress to support any law which confers additional rank upon the medical officers of the Army.

Resolved, That we consider the law which prohibits *appointment* and promotion in the Medical Corps of the Army as unwise and unjust, and in conflict with the best interests of the Government, and that it ought to be repealed.

We submit, 1st, That if any result whatever could with reason be expected from such a petition or set of resolutions, it or they should have emanated from some national body, such as the "American Medical Association," and not from a local society composed of a handful of men, without name, reputation or influence beyond the precincts of San Francisco; 2d, We venture to state that not more than five or six members of the entire Society know anything whatever about the organization and rank of the Medical Corps of either the Army or Navy, and therefore are not entitled to any "opinion;" 3d, No specific suggestion or demand is made in the petition, only that "we respectfully urge upon our Senators and Representatives in Congress to *support* any law which confers

additional rank upon the medical officers of the Army," the desire seeming to be only to acquire *additional* rank, without caring what the additional rank shall amount to. Indeed, the whole resolution, in its construction, seems confused, as it requests "the *support* of any law," which implies that some such law now exists and only needs the support of its makers; when the facts are, we presume, that they desire to have some law passed, whereby their ends may be secured.

The second resolution seems to have for its object the denunciation of the existing law, which, to use its language, "is unwise, unjust, and in conflict with the best interests of the Government."

What will Senators and Representatives (should they take the trouble to read or have read this petition) think of this resolution? What will likely be their opinion of a society in this far-off quarter of the country that presumes to tell them that they are *unwise* and *unjust?* What data, indeed, have the Society for making this assertion? The rank of the Medical Corps of the Army of the United States to-day is higher than that of England, France, Germany or Russia; and in the recent civil war it has never transpired that the country or *Government* suffered in consequence of the non-existence of that rank which is now being asked for by a few ambitious assistant surgeons, who are never satisfied, but yet who may have enjoyed peculiarprivileges, such as being stationed in large cities, acquiring private practice, receiving official and municipal appointments, and even, in a few short months, being enabled to use a prefix or affix to their names in addition is the simple M. D.; and who, consequently, have grown so rapidly as to exceed in their corporeal measurements the capacity of their uniforms.

Why the Society considers this "law which prohibits *appointments*" "unwise," we fail to discern. Surely the experience acquired during the late war should be enough to teach every observer that even with the rigid discipline of the service, requiring a thorough examination, there

were many who crept into the Medical Corps who were undeserving and illy fitted to assume the duties which necessarily are assigned medical officers. Would the Society now, with these observations before them, ask that the door be thrown wide open, that a man having the greatest political influence shall take precedence of one who has been thoroughly educated? These are questions we cannot answer; but for ourselves, we say that we had no such idea when we signed the paper, and if such was the intention of its authors, we beg leave herewith to withdraw our endorsement of the same.

In conclusion: we are distinctly of the opinion that as the Army and Navy are both represented (annually) in the convocations of the "American Medical Association," that this is the proper body to move in the direction that the petition referred to purports to be aimed.

Stupidity in High Places—Board of Education and Scarlet Fever.

On Saturday night last, a meeting of the Board of Education was called, to take into consideration the propriety of extending the present vacation of the public schools. A resolution was introduced, based upon the recommendation of Dr. Logan, Secretary of the "State Board of Health," and asking that the vacation be extended for two weeks; but the *astuteness* of the learned Superintendent in health matters, supported by the experienced Mr. Bragg and sustained by the sagacious Mr. Davis, squelched the resolution. Where these guardians of the rising generation acquired their knowledge of the influence of herding children together during the prevalence of an epidemic of scarlatina, we know not; but we are frank to say that it is rather remarkable that gentlemen to whom the direction of our schools are confided, and for this reason, if for no other, are presumed to be intelligent, should disregard the

recommendations of such as have, for a life-time, made disease and the laws of health their study.

One of these, Mr. Bragg, doubtless with a desire to exhibit his knowledge of such matters, made an announcement which even to us is startling, that "eighty or ninety per cent. of the children had had the disease;" the source of his information is questionable, and we are inclined to think that the announcement was the result of a late supper or an insatiable desire to distinguish himself. Superintendent Denman has also enlightened the community and profession by the astounding relation of his experience, viz.: that "during the twenty-three years he had been connected with the Department, the schools had never been closed for any epidemic of small-pox," as though there was any similarity between the diseases. The most remarkable feature of this whole matter is that the Superintendent should, in the brief period of thirty-six hours, have a very different experience, as it is well known that he *closed the Boy's High School* for one week, in consequence of a single case of *small-pox* occurring in the neighborhood—and yet he could see no propriety in protracting the vacation during the prevalence of scarlatina, when it is known to us, that in more than one instance, teachers, to say nothing of pupils, have left infected houses and repaired to their school-rooms, with what effect we presume we must refer to the savans of the "Board of Education," who exhibit so much learning in such matters, even though they be deficient in others. Does he not know, as Dr. Bradbury stated, that it is generally conceded that we have a protection, through vaccination, from this disease; and does he not also know that scarlatina is essentially a disease of childhood, whilst small-pox has no such preference.

Mr. Bragg, Mr. Davis and Mr. Clement we can in a measure excuse for neither of them have ever been distinguished for any qualification fitting them for the position which they occupy; but with Mr. Denman we are astonished, that a man of his experience and observation should deliver himself as upon the occasion referred to.

So far as the suspension of Rule 119 of the Code of School Laws may go, we think they have by their action exhibited yet more stupidity, and the practical operation of their act will make itself manifest in a very few weeks. A. sends his child to school; B. keeps his at home. A's child progressed and is at the conclusion of the term prepared to be advanced. B's child being detained at home for a month fails to advance with the rest of the class, and hence a great injustice is done him—or he must have his brain taxed 25 per cent. more in order to catch up with his class.

Is this proper or just—is it just either to the child or the teacher, who in his or her ambition to bring their class up to the required standard, performs one-fourth more labor than he or she is paid for, and more when added to their usual arduous labors than is conducive to health?

The truth is, that it is high time that men were sent to our Board of Education who themselves have been educated, and not so remotely as to have forgotten their experience —and who consequently will have some consideration for both child and teacher—and at least have common sense enough to be guided in matters pertaining to the health of our youth, by those who are the natural guardians of public hygiene.

What Does It Mean?

At a recent meeting, the "City Board of Health," without any assignable cause, applied again its guillotine: this time to the neck of Dr. Hoff, who has been Visiting Surgeon to the City and County Hospital since the organization of the Board, and who, we have reason to believe, has given entire satisfaction.

Is it that this is a political movement and that the public charities of San Francisco shall continue to oscillate in their conduct like the pendulum of a clock between the two parties, or is it worse, viz.: that the Board of Health,

composed largely of the friends of the "Medical School of many Aliases," have determined to prostitute itself by ignoring everything else and devoting itself to the interests of said school? If so, why not announce the fact at once, that all may have fair play.

We cannot believe that the Mayor would lend himself to any such action if understood by him, and, indeed, it may not be that such is the disposition of the majority of the Board; yet it certainly looks as though there was some underground work going on, of which this last movement is likely the initial step.

We would simply suggest to the gentlemen of the Board that it may be as well to step cautiously; sometime or other a period of retribution will arrive. "It is a long *lane* that has no turn!"

Culpable Carelessness in Dispensing Drugs.

The Coroner's jury impaneled to inquire into the cause of death of the child Jacob Borren, which occurred on Sunday, the 4th inst., have rendered the following verdict: "That H. R. Harris, an employé in the drug store of J. W. Angell, on the corner of Folsom and First streets, dispensed the poison to a girl of 15 years of age, and sister of deceased; and that both Harris and Angell are guilty of culpable negligence in not acquainting the purchaser with the nature of the poison."

When the Legislature passed the Act "regulating the sale and dispensing of drugs and medicines," we had supposed that it contemplated in those provisions which authorized the Phamaceutical Society to grant upon examination to candidates, licenses to engage in the drug business, etc., that all druggists then engaged in the business should be subjected to this examination; this seems not to be the case; they simply applied to such as "may hereafter engage in the dispensing of medicines." We are, however, quite

positive that the Act referred to does prohibit the dispensing of poisons without the prescription of a physician, and that even laudanum cannot be sold in larger quantities than one ounce without such authority. Why then, this clerk should, in the reckless manner described by himself, dispense 20 grains of opium in one powder, we cannot understand, and if the law at present fails to cover such carelessness, it should at once be so modified as to accomplish the end. It is no excuse to say that an "opening powder" was called for, and because of the similarity in the sound of the two, that the clerk was justified in dispensing 20 grains of "opium powder," for even in this case, 20 grains of opium is more than can be used with safety; and the druggist should have refused to sell that amount even when ordered by a physician, as in that case it might be an error of the physician in affixing an 0 to the 2.

Viewed from any standpoint we may, it is a sad occurrence, and whilst we feel some sympathy for the unfortunate man who finds himself charged with felony, yet it is necessary and proper an example should be made, that those occupying the responsible position of dispensers of medicine shall be admonished to exercise greater care than was done in this case.

EFFICACY OF ICE IN GASTRALGIA.—Dr. Joulin proposes a new method of treating gastralgia as follows: 1. A cataplasm of ice morning and evening, ten minutes each time, over the epigastrium. 2. A sinapism immediately after removal of the ice and upon the same surface; the sinapism to be kept on as long as possible. 3. Crushed ice in tablespoonful doses morning and evening, every alternate five minutes, for an hour. The crushed ice may be substituted by a water ice flavored to taste. 4. Mustard baths three times a week.

The author claims remarkable results by treatment in this way.—*France Medicale*, June 7, 1873—*Southern Medical Record*.

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during October, 1873.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	330	37	19	29	2	43	9	S. F. B'd of Health.
Sacramento	46	9	3	2	0	0	3	Sac. B'd of Health.
Petaluma	5	2	0	0	0	0	0	Dr. G. W. Graves.
Dixon	0	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	9	0	0	3	0	1	0	Stockton B'd Health.
Marysville	...	..	..	..	.	..	..	Dr. C. E. Stone.
Placerville	3	0	0	0	0	0	1	Dr. E. A. Kunkler.
San Diego County	...	..	..	..	.	..	..	Dr. T. C. Stockton.
Oroville	...	..	..	..	.	..	..	Dr. J. M. Vance.
Oakland	...	..	..	..	.	..	..	Dr. T. H. Pinkerton.
Los Angeles	23	2	0	1	0	0	1	Dr. H. S. Orme.
Truckee	0	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	2	0	1	0	0	0	0	Dr. J. S. Adams.
Napa City	4	0	0	0	1	0	2	Dr. M. B. Pond.
Watsonville	...	..	..	..	.	..	..	Dr. C. E. Cleveland.
Folsom	0	0	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	...	..	..	..	.	..	..	Dr. C. L. Anderson.
Suisun, Fairfield	...	..	..	..	.	..	..	Dr. S. D. Campbell.
Colusa	3	0	0	0	0	0	1	Dr. Luke Robinson.
Trinity County	...	..	..	..	.	..	..	Dr. J. C. Montague.
Santa Barbara	9	2	0	0	0	1	0	Dr. C. B. Bates.
Redwood City	5	0	0	0	0	0	0	Dr. Kirkpatrick.
San Andreas	2	0	0	0	0	0	0	Dr. C. B. Robertson.
Auburn	...	..	..	..	.	..	..	Dr. A. S. Dubois.
Tulare County	...	..	..	..	.	..	..	Dr. M. Baker.
Siskiyou County	2	1	0	0	0	0	0	Dr. T. T. Cabanis.

Remarks—It is with regret that we find the advice given "for the benefit of the public" last month, respecting Scarlatina, was as well-timed as proper. We regret still more to have to state that, notwithstanding our precautionary measures, the disease is spreading, not only in the metropolis, but in all parts of the State. At the present writing (December 23d) we learn that twenty deaths were

caused by it in San Francisco during the week ending the 20th inst. At this rate of increase, the number of deaths would be double of what are shown in our present table for October and one-fourth more than for November. In view of the fact already stated, that the only preventive means that promise any positively good results consist in isolation—the separation of the healthy from those affected with the disease and from those who have intercourse with such patients—would it not be as well to extend the approaching school vacation until such period as the epidemic gives indications of less virulence than it now manifests? As it is impossible to isolate children in the same school, we throw out this suggestion for the consideration of parents, as well as School Directors; believing it to be better policy to lose a few months' tuition than to incur the hazard of contracting one of the most dangerous diseases of childhood—the sequelæ, or after effects of which, even in non-fatal cases, not infrequently occasion great and protracted sufferings. Our table shows that some of our correspondents have been rather dilatory. It is presumable that, with the exception of Oakland, there have been no deaths in the localities left blank: still we wish to be made certain of the fact, if such meaning is intended to be conveyed by no report being sent to this office.

THOS. M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

HOW TO REMOVE ADHESIVE PLASTER.—Every surgeon, doubtless, is familiar with the appearance of a part which has been enveloped in adhesive plaster, after the straps have been removed. The appearance is not one in very good keeping with a cleanly and neat surgical dressing. The portion of the plaster which is left adhering to the skin may be quickly and completely removed by the use of oil of turpentine and sweet oil. Use a little more than half turpentine. This compound, carefully rubbed over the parts with a bit of cloth or sponge, and then washed off with warm soap-suds, will leave the surface as clean as nature ever intended.—*New York Medical Record—Southern Medical Record.*

Monthly Report of Deaths Registered in San Francisco during November, 1873.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	6	....	..	1	2	2	1	6	..	1	3	2	..
Measles	..	....	..	..	..	..	..	..	..	..	..	..	..
Scarlatina	59	....	37	21	1	..	..	28	31	53	5	..	1
Diphtheria	1	....	..	1	..	..	..	1	..	1	..	..	..
Croup	2	....	1	1	..	..	..	..	2	1	1	..	..
Whooping Cough	3	....	3	..	..	..	..	..	3	3	..	..	..
Typhus and Typhoid Fevers	8	....	..	2	6	..	..	6	2	1	2	..	5
Diarrhœa and Dysentery	5	....	3	..	2	..	..	4	1	3	..	..	2
Cholera Infantum	5	....	5	..	..	..	..	3	2	5	..	..	..
Cholera Morbus	..	....	..	..	..	..	..	..	..	..	..	..	..
Pyemia	1	....	..	..	..	1	..	1	..	..	..	..	1
Cerebro-Spinal Meningitis	1	....	1	..	..	..	..	..	1	1	..	..	.
Syphilis	4	....	..	..	4	..	..	2	2	..	1	1	2
Alcoholism	6	....	..	..	5	1	..	3	3	..	..	..	6
2—Cancer	7	....	..	..	7	..	..	6	1	..	..	..	7
Phthisis Pulmonalis	47	....	..	6	36	4	1	30	17	2	14	7	24
Hydrocephalus & Tubercular Meningitis	6	....	5	1	..	..	..	3	3	6	..	..	..
3—Encephalitis	15	....	6	4	4	1	..	9	6	10	3	..	2
Apoplexy	4	....	..	1	1	1	1	4	..	..	1	..	3
Convulsions	5	....	5	..	..	..	..	2	3	5	..	..	..
Other Diseases of the Nervous System	14	....	4	2	5	2	1	8	6	7	..	..	7
Aneurism	3	....	..	..	3	..	..	3	..	..	1	..	2
Diseases of the Heart	17	....	..	..	15	1	1	11	6	..	5	..	12
Pneumonia	10	....	2	2	6	..	..	6	4	4	1	..	5
Bronchitis	4	....	2	1	1	..	..	3	1	2	..	..	2
Other Diseases of the Respiratory Organs	7	....	2	..	4	1	..	5	2	3	3	..	1
Diseases of the Stomach and Bowels	10	....	7	..	3	..	..	6	4	7	1	..	2
Diseases of the Liver	4	....	1	1	1	1	..	3	1	2	..	..	2
Bright's Disease and Nephritis	4	....	..	..	1	1	2	3	1	..	..	..	4
4—Puerperal Diseases	2	....	..	..	2	..	..	..	2	..	..	..	2
Atrophy and Inanition	24	....	18	..	..	2	4	10	14	18	2	..	4
5—Suicides	5	....	..	..	3	1	1	5	..	..	2	..	3
Deaths in Institutions	49	....	3	3	33	7	3	39	10	4	10	1	34
Still-Births	..	....	..	..	..	..	..	14	11	..	..	..	..
1—Zymotic Diseases	106	31.36	51	26	22	5	2	56	50	70	14	3	20
2—Constitutional Diseases	60	17.75	5	7	43	4	1	39	21	8	4	7	31
3—Local Diseases	108	31.95	30	12	49	11	5	72	36	41	19	2	46
4—Developmental Diseases	29	8.59	21	..	2	2	4	12	17	21	2	..	6
5—Deaths from Violence	13	3.85	1	..	9	2	1	13	..	1	3	..	9
Deaths from Unknown Causes: Chinese	21	6.21	2	..	15	4	..	20	1	..	..	21	..
Deaths from Unknown Causes: Others	1	.29	..	1	..	..	..	1	..	1	..	..	..
Total	338	.....	110	46	141	28	13	213	125	142	52	33	111
Per Cent. to Total Mortality	..	100.00	32.54	13.61	41.71	8.30	2.96	63.02	36.98	42.00	15.39	9.77	31.9

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Book Reviews.

A SYSTEM OF MIDWIFERY, INCLUDING THE DISEASES OF PREGNANCY AND THE PUERPERAL STATE. By William Leishman, M. D., Regius Professor of Midwifery in the University of Glasgow; Physician to the University Lying-in Hospital, etc., etc., etc. With one hundred and eighty-two illustrations. Philadelphia: Henry C. Lea & Co.; San Francisco: A. Roman & Co.

This work of Dr. Leishman has just been issued by the publishers. To use the language of the preface, "the author's object in this work has been to furnish to students and practitioners a complete system of the midwifery of the present day," in which we are pleased to say he has been eminently successful. We doubt if another book of its kind exists in which a more comprehensive discussion or treatment of the whole subject can be found.

We had supposed, and now believe, that the great laws of Practice in Midwifery were so fixed as to render it almost impossible for sufficient new matter of interest to be presented as to justify a new work; yet this volume is so complete, and considers the various questions of which it treats so systematically, as to make it a great improvement upon others as a text-book for students, and a book of reference for the practitioner.

It has, however, one fault, which characterizes too many of our American publications and re-publications, viz.: wretchedly-executed illustrations. The object of a wood-cut or illustration of any kind is to convey to the mind, through the sense of vision, ideas that either cannot be conveyed through the text, or to *assist* the mind in comprehending what has been attempted through the text. If, then, the drawing be defective, the object is not attained, and the presence of the would-be illustration mars the beauty of the book and disgusts its possessor. Far better would it be to omit wood-cuts and like illustrations, unless they be of the very best character.

With this exception, the book of Dr. Leishman is really

an excellent and exhaustive treatise, and is deserving of a place in the library of every student and practitioner.

ON THE MECHANICAL TREATMENT OF DISEASE OF THE HIP JOINT. By Chas. Fayette Taylor, M. D., Surgeon to the New York Orthopœdic Dispensary and Hospital, etc., etc., etc. New York: Wm. Wood & Co.; San Francisco: A. L. Bancroft & Co.

This monograph of sixty-two pages is a specimen of perfection in typography, on tinted paper, and is one of the most beautifully and elaborately-illustrated volumes we have ever seen. As its author says in the preface, it "is intended to be just what its name implies—an Exposition of the Mechanical Treatment of Disease of the Hip Joint—and nothing more." And we are frank to say that it presents the subject in a clear and intelligent manner. The innovation which the author makes upon old-established principles, or rather the method of carrying out those principles in practice, unquestionably deserve attention and a careful trial. His reasoning is philosophical, and the facts in, and results of cases presented are strong evidences of the superiority of his treatment.

Whilst we have for some years been a disciple of Sayre in the treatment of this disease, we nevertheless see some points in the suggestions of Dr. Taylor which address themselves to our understanding in so clear and forcible a manner, as to carry conviction, at least, to the point of determining us to test them.

Dr. Taylor's little book is written in a terse and pleasant style, which, together with the intrinsic merit of its contents, should commend it to all who feel any interest in the pathology and treatment of this class of diseases. No surgeon should be without it upon his table or the shelves of his library.

PHARMACOPŒIA GERMANICA: THE GERMAN PHARMACOPŒIA. Translated by C. L. Lochman. With an Appendix explanatory of the French Metrical System, and Tables of Weights and Measures, etc. Philadelphia: David Elder & Co.

This volume of three hundred and eighty-two pages, including an index of the English names, an index of the Latin names, an index of the German names and an index of Systematic names employed in the various pharmacopœias, is one of the greatest acquisitions to the science and art of pharmacy of the present day.

The translation before us of the original work, which has been officially adopted as the sole authority throughout the German Empire, is perfect in itself, and whilst the paper used may not be as good as it should be for a work of constant reference, the typography is excellent.

In this country, where so many of our medical practitioners and so few of our pharmacists are German, it is remarkable that more mistakes have, and do not occur through the want of this or some similar book; and now that the want has been supplied, and so cheaply, there can be no excuse for any pharmacist or druggist, and, we might add practitioner, being without it.

It is greatly condensed from the text of the original, and yet furnishes the English, Latin, German and Systematic names of all the Materia Medica, together with the modus operandi or mode of making the preparations used, and since the German physicians are, in a large degree, accustomed to use the German nomenclature, the possession of this volume we should think indispensable to every apothecary. We opine that it will meet with a larger sale on this coast than in any other part of the United States.

TRANSACTIONS OF THE CALIFORNIA STATE DENTAL ASSOCIATION: At the First, Second, Third and Fourth Annual Sessions, held in San Francisco in 1870, 1871, 1872, 1873.

Through the politeness of the Corresponding Secretary, Henry E. Knox, D. D. S., we have received a copy of the "Transactions of the California State Dental Association," which is a volume of some two hundred and odd pages, printed upon tinted paper, and presenting a very acceptable appearance.

In glancing over the matter of this, the first three volumes bound in one, we discover a great deal that is very meritorious, and we are pleased with the apparent activity of the Association, especially as to the manifest disposition and determination to elevate Dentistry to its proper rank among the professions, and no longer allow it to occupy (as it has done in this country, through want of organization,) the position of a mechanical art.

The more recent action of the Association in the direction of establishing a Dental School is commendable, and if the vigor which has characterized the transactions is thrown into this channel, we shall see, within a few months, a college reared in our midst that will be a source of pride to the State, honor to its projectors, and a promoter of the scientific acquirement of the profession, that will induce all who propose to follow it to seek instruction and enter upon the practice honorably.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR FEBRUARY, 1874.

Surgery.

A Case of Traumatic Tetanus treated mainly with Calabar Bean—Death.

BY CHARLES B. BRIGHAM, A.M., M.D., PROFESSOR OF ORTHOPEDIC AND MILITARY SURGERY IN UNIVERSITY OF CALIFORNIA.

P. C., æt. 32, married. The patient, on the 30th of November, 1873, received a scalp wound in the parietal region. The bone was not affected, at least externally; the hemorrhage was considerable, but was arrested by compression by means of a sponge and bandage shortly after the accident. The patient, moreover, received a contused wound of the right ring-finger, involving the terminal phalanx, but not to such an extent as to warrant amputation. These wounds were caused by a wagon-wheel. They were dressed with carbolic acid wash, one part to thirty, and, in the course of a week, the scalp wound had wholly cicatrized, and that of the finger, having cast off a few bits of bone, had become filled with healthy, rosy granulations.

On the 10th of December, the patient took a short walk out of doors, for the first time since the accident. In the evening of that day, he felt a pain in the back of the head and neck. A poultice was applied to the entire neck.

December 11th—The patient complained of stiffness of neck and jaw and of a difficulty in swallowing. There was no pain in any other part of the body. The finger looked as well as usual. Pulse 86 ; temp. 39. Suspecting tetanus, I ordered fifteen drops of the tincture of calabar bean every three hours, day and night.

December 12th–There is considerable opisthotonos. The patient has taken nothing since yesterday noon, owing to the impossibility to swallow. Pulse 72 ; temp. 38½. He is in better spirits this evening, but the rigidity continues and there are occasional spasms, affecting, principally, the region between the shoulders. The bowels are freely open.

December 13th—Pulse 100; temp. 38. The spasms have become more violent and make the patient cry out at short intervals ; the jaw is firmly set; has taken no medicine during eight hours of the night, owing to the impossibility of swallowing; he has had occasional naps, during which he has bitten his tongue so that it bled; almost all day he has been in a violent perspiration; his pupils are somewhat dilated; he cannot raise himself without help, indeed, he cannot even turn himself over; he complains of hunger; has a tired, oldish expression of face. Rectal injections of beef-tea and brandy were ordered every three hours. The lips were moistened with ice from time to time.

December 14th—Pulse 96; temp. 38¼. The patient refused even rectal injections and so was placed under chloroform, nearly four ounces of which were needed to put the patient to sleep; he slept about an hour, all the muscles being relaxed; a ptosis of the left eyelid was noticed to-day; the spasms are quite frequent, almost every three minutes, causing the patient to cry out with pain; the calabar bean was given by injection, a teaspoonful of the tincture being given at a single time ; the head seems drawn

backwards more than ever; the limbs are unaffected, except during the spasms; the pains seem to be working down towards the lower part of the chest and abdomen.

Evening—Temp. 39; pulse 100.

December 15th—The jaw is more rigid than ever; chloroform was given during two hours; there are severe spasms of the arms against the chest; the rectal injections are kept up constantly; the ptosis of the left eyelid is quite marked; there was constant priapism during chloroformization; the patient tastes the brandy of the enema in his mouth. Pulse 88; temp. 38¼.

At noon the constant current was applied for an hour in the cervico lumbar region; the patient is as stiff as a log; he sneezed frequently during the afternoon; there continues a violent perspiration all over the body.

December 16th—Pulse 130; could not take the temperature, on account of the spasms being so severe and constant. Ice was applied the entire length of the spine in oiled silk bags and really afforded great relief to the patient; the constant current was applied during an hour morning and afternoon; chloroform was given during an hour this morning.

In the evening the stiffness of the neck diminished and the head came into a more natural position; the severity of the abdominal spasms cause the knees to be bent up near the chest; chloroform was given for one hour this evening; it required a third the amount of that necessary this morning. Pulse 80; temp. 38½. The pupils are contracted more than ever.

December 17th—The spasms occupy the chest and diaphragm; the breathing is rapid and difficult; the spasms are less severe and less frequent; a subcutaneous injection of ¾ grain of morphia was given; no injections were given during the night, as the patient's wife thought that it made his abdomen swell; so, contrary to express orders, she neglected to give them; the urine at this time was thick and scanty, containing a moderate quantity of albumen, and leaving a reddish sediment which lined the vessel; the jaw seemed less rigid.

At the suggestion of Dr. George Hewston, sixty grains of the bromide of potassa was given in an enema in the evening. Pulse 130; temp. 39°. An enema was given, but came away almost immediately afterwards; the jaw opens quite freely, but the patient is unable to swallow even his saliva; a cold perspiration is especially marked on the legs and arms.

At three o'clock in the morning of the next day the patient died, immediately after a spasm. No autopsy was allowed.

It is worthy of remark that the temperature in this observation, instead of suddenly lowering itself at the commencement of the tetanus, as is usually the case, and then rising gradually until death, assumed throughout a tolerable regularity, beginning and ending with the same degree, namely, 39; nor did it fall lower than 38° during the course of the malady. There was no pain, at any time referred, to the pit of the stomach. The ice bags along the entire spine afforded great relief to the patient, much more so than the action of the constant current, although the latter afforded relief for the time being. The action of the calabar bean was not particularly marked. The heaviness of the head and the trembling of the fingers noticed with the patient, may or may not have been the result of its use.

Case of Compound Comminuted Fracture of the Leg.

BY P. W. RANDALL, M.D., SAN QUENTIN.

Sibrian, aged forty-three (43) years, was at work with a number of other hands on the 2d of October, 1873, digging away a bank of earth, the face of which was some ten or fifteen feet high. While the laborers were undermining on a level with the grade, a large body of earth and rocks suddenly caved off and fell upon the spot where the men were at work, all of whom, however, made a safe retreat

from the falling mass except Sibrian, who, while going backwards, struck his heels against some impediment, and fell on his back, and was entirely buried, except his face, beneath the precipitated mass of rocks and earth, the result of which was the fracture of his left leg about two and one-half inches above the ankle. The foot was turned up against the outside of the leg; the tibia was forced through the skin and into the earth; the fibula was also thrust through the skin, but was not quite so much exposed to the sand as was the tibia.

In this condition I had him taken into the prison hospital.

After, perhaps, an hour's close inspection and diligent labor, I succeeded in cleansing the ends of the bones, both above and below, as well as the wound. Two small fragments of bone, as large as the end of the little finger, were broken loose from the inner surface of the end of the tibia above, and a piece, also, from the end of the fibula attached to the foot, all of which were dissected from their attachments to the surrounding parts. I then attempted to place the foot *in situ*, which I was unable to do until I had enlarged the aperture in the skin through which the bones had protruded. I then succeeded in reducing the fracture and, after placing the ends of the bones in apposition and bathing and cleansing the wound well with a weak solution of carbolic acid, I applied the roller bandage from the toes to the knee, with compresses and improvised splints made of pasteboard and shingles, leaving the wound in the skin accessible, with directions to keep the parts constantly wet with a solution composed of water and glycerine, equal parts, and carbolic acid, in the proportion of one to thirty, and sulph. morph. grss. every six hours, and at four o'clock left my patient for the night.

October 3d, seven o'clock in the morning—Found my patient suffering considerable pain, leg swollen, bandage tight. I loosened the bandage and prescribed an old opium pill gr. ij, continued carbolic acid lotion unremittingly, opium pill to be repeated, *pro re rata;* procured from H. P. Wakelee & Co., patent splints for left leg, which

maintained the parts in position and with comparative comfort to the patient.

October 4th—Patient slept some during the night; swelling of leg not increased; continued topical applications and pill opium to relieve pain, and an enema every day, with tea and toast for diet.

October 5th—Patient doing well; continue treatment, with anodyne at night.

October 6th—Patient now comfortable; prescribed pulv. seidlitz every four hours until bowels were moved, and, for local application to leg, the following:

℞ Acid carbolic, ʒi;
Glycerine;
Aqua aa, ℥iv.—M.

And keep the parts constantly moist.

The above treatment was followed during the progress of the case, which has continued to improve without a single untoward symptom.

At the end of the third week the wound had healed. There has been very little suppuration and no offensiveness.

November 20th—Splints removed; bandage continued for support; slight tumefaction about the ankle.

December 20th—Patient entirely convalescent; going about the wards on crutches; leg straight, with free use of ankle-joint.

New Operations for Aneurism.

A novel operation was performed very recently at the Pennsylvania Hospital of Philadelphia, by Dr. R. Levis, and the result, if the case turns out favorably, will be a very decided advance in surgery. The case was one of subclavian aneurism, involving possibly the innominate. As ligation of the artery was deemed inexpedient by the surgeons who examined the case, Dr. Levis determined to carry out a plan of his own, which is a modification of that adopted by Dr. Moore, of the Middlesex Hospital, and

since followed by Dr. Donville and Mr. Murray, of England. The plan of these latter gentlemen was to introduce fine wire into aneurisms, to afford a nucleus about which clots could form. Dr. Levis conceived the idea of using horse-hair, believing that it would offer sufficient obstacle to the blood-current to produce coagulation, and also, being animal in its nature, would act like the catgut ligature and not give rise to suppuration. The horse-hair was introduced through a fine sharp needle canula, which was plunged into the sac. No difficulty was experienced in its introduction, and twenty-four feet nine inches were safely stowed away in the aneurism. A marked diminution in the force of the pulsation of the aneurism, and of the pulse of the wrist, was at once induced. This has increased since the operation, the tumor has also gained in solidity, the pain has lessened very much, and no unfavorable symptoms have resulted. At last accounts the case was still progressing favorably.—*Philadelphia Medical Times.*

[We regret to be obliged to record that the case of Dr. Levis above reported has since died; yet the diminution in the force of the pulsation in the tumour, the length of time the patient lived after the operation, and the simplicity of the procedure itself commend it to the consideration of the profession. Although unsuccessful as to result, we cannot fail to see an idea worthy of further trial before condemning the operation.—EDITOR WESTERN LANCET.]

Facial Neuralgia Treated by Re-section of the Nerves.

Dr. M. Schuppert records two cases in which he successfully adopted this practice; in one, the patient was thirty-one years of age and suffered from neuralgia of the right side of the face, for which he had all his molars extracted successively without relief. The hard palate was then pointed to as the seat of pain, and Dr. Schuppert scarified the outer and inner surface of the posterior portion of the upper maxillary bone, with the result that the pain was removed for some months, when it returned with all its former severity. It started on this occasion from the right canine tooth, which he also had extracted without benefit. He suffered great pain for the succeeding

nine months, when Dr. Schuppert re-sected the infraorbital nerve from its egress at the foramen infraorbitale to the anterior dental nerve, including the latter in the operation. The only results obtained were a perfect anæsthesia of all the parts of the face supplied by the nerve and a partial loss of the mobility of the corresponding muscles. The neuralgia remained untouched by the operation. Induced by the happy results obtained by Dr. Carnochan, of New York, from resection of the trunk of the second branch of the fifth pair of nerves, Dr. Schuppert determined to have recourse to this operation. By accident he was led to execute the resection, not as Carnochan proposed, from below the eye, taking the infraorbital nerve as a leader, but from the supramaxillary fossa, a method of operation not hitherto performed. To reach the nerve in that locality, portions of the malar bone and of the zygomatic process of the temporal had to be removed. The small space in which the nerve was imbedded was enlarged by cutting away a portion of the posterior wall of the superior maxillary bone. The nerve was divided behind the posterior dental nerve and by a second cut was removed from the foramen rotundum. No pain recurred for two months and the case was published as having resulted in perfect recovery. The pain, however, then recommenced, starting from the right-hand palate, spreading from thence up to the eye and temple. The most remarkable feature of the case was the perfect restoration of the sensibility of the parts. The patient asserted that with the restoration of sensibility the pain had also returned. Dr. Schuppert was aware that, notwithstanding the two preceding operations, a portion of the nerve had been left behind. In the first resection, the main nerve had been divided just behind the anterior dental, and in the second behind the posterior dental, and he therefore resolved to remove the intermediate stump. The stump was found in the middle of the floor of the orbit, with branches attached to it belonging to the middle dental, after the division of which it was easily removed, measuring 15 mm. in length ($\frac{2}{3}$ inch), but with no newly formed nervous matter either before or behind it. To assure himself that the nerve was wholly destroyed, the actual cautery was pushed beyond the posterior wall of the maxillary bone, the eyeball being protected. After the wound had been closed with the exception of its lowest part, in which a drainage-tube was inserted, a general rigor occurred, lasting for nearly an hour. On waking from the chloroform, intense pain in the head was experienced,

which lasted for four hours. The next morning the patient's face was considerably swollen, and he complained of the old pain, so that this severe operation was attended by a completely negative result. In the course of a fortnight the pain, which now included the parts supplied by the third division of the fifth, was so unbearable that the patient begged that some further operation might be undertaken. He was again placed under chloroform, an incision was made, beginning below the lobe of the left ear, and carried down the edge of the lower maxillary bone; the ordinary proceeding for exposing the pterygoid muscles in dissection was then adopted, and the inferior dental nerve and artery were then divided, and a piece of the former an eighteenth of an inch in length removed. On recovering from the anæsthesia, tormenting pain was still complained of. Large doses of quinine and opium relieved it to some extent, and the acute sensibility of the lower part of the face was abolished. He returned to his work. About a year later, however, he reapplied for relief, and Dr. Schuppert was forced to the conclusion that the seventh must be the nerve implicated. Still, on reading a paper by Nussbaum, to the effect that ligature of the carotid was the *non plus ultra* against facial neuralgia, he preferred to try that plan rather than re-sect a nerve believed to be purely motor. This was accordingly done, but again without relief, and the division of the seventh nerve was finally agreed upon. After a long, tedious, difficult, bloody, and dangerous operation, that nerve was divided. Serious symptoms followed, but the pain was gone. The regular application of the electric current was commenced, as paralysis of the muscles of the left extremities had supervened. The paralysis was permanent in the upper extremity, but partial recovery took place in the lower. No return of the pain has occurred during the last five years.—*New Orleans Medical and Surgical Journal*, November, 1873.

Experiments on Strangulated and Incarcerated Hernia.

Dr. F. Schweninger has made some interesting experiments with a view of testing the truth of the theory broached by Roser, to the effect that the intestine plays an active part in the production of strangulated hernia and the like. In these experiments the abdominal cavity of dogs

was opened by a small incision in the linea alba; a loop of intestine was drawn out and embraced by india-rubber rings of various width; the intestine and india-rubber rings were then reintroduced into the cavity, the wound carefully closed, and the parts examined after the lapse of a variable time. Dr. Schweninger found that the results might be included in three groups.

1. In the first, the immediate cause of the constriction lies in the gut itself; the intestine takes an active part in the process, to wit: that portion of it which is forced through the constriction assumes a club-shaped or clavate form, and strives to stretch beyond and away from the ring, dragging the adjoining parts until, in fact, the hernial sac is completely filled. The process of strangulation is here of a chronic nature, and the parts are most easily reduced. He does not deny that the difficulty in the way of reduction may be greatly increased by Roser's valvular mechanism or by the inflection of the intestine itself.

2. In a second class of cases the strangulation is due to a want of proportion between the intestine and the hernial opening, though it is augmented by the above-mentioned action of the intestine.

3. The strangulation is caused by the narrowness of the hernial opening, either because the opening is dragged upon by muscular tissue or because a portion of omentum surrounds the neck of the hernial protrusion.

As a consequence of these conditions there occur (1), venous hyperæmia and ecchymoses, which readily pass into gangrene on removal of the constricting cause, and (2), insufficient supply of arterial blood, which also leads to gangrene or to inflammation, with formation of adhesions between the intestine and the sac. Such cases can only be cured by operation.—*Centralblatt*, 1873, No. 48.

GALVANO-EMESIS.—Emesis may be produced by means of electricity, when other means fail or are impracticable. It may be brought about by introducing one electrode into the upper part of the œsophagus and applying the other over the epigastric region. Dr. Fox relates a case in the *British Medical Journal*, in which a child was brought to him in an asphyxiated state from eating poisonous mushrooms. He applied the current as above prescribed, and vomiting ensued immediately.

Carbolic Acid in Treatment of Lupus.

Dr. Chapman reports in the *N. Y. Medical Review*, a case of lupus of twenty-five years' duration, successfully treated by the application of carbolic acid. The patient was aet. sixty-five. The disease had commenced as a small tubercle near the tip of the nose, and, although treated by a number of physicians, had gradually spread to the forehead and cheeks. When seen by Dr. C., erysipelas was setting in in connection with it, and it was spreading rapidly, involving the whole nose, and extending to the cheeks and upper lip. He says:

First of all, to subdue the erysipelatous inflammation, I ordered the whole surface to be penciled once in three hours with the fluid ext. of veratrum viride, and in forty-eight hours had the satisfaction of seeing the erysipelas entirely removed. I then commenced the use of carbolic acid, the remedy with which I expected to cure the disease. I used Nickel's crystals melted, one part, and olive oil, one part; with this I penciled the whole surface of the disease twice a day. Occasionally I would use the clear crystals once a day, before using the carbolated oil. I treated my patient in this way for forty-eight days, when I discharged him cured.

With the experience I have had with the carbolic acid in this disease, I should not hesitate to pronounce a cure in any and all cases of lupus. I should use the acid, however, full strength as often as once in two or three days, and not reduce it more than one-half at any time. I prefer reducing it with olive oil, as that seems to keep moist longer than glycerine or anything else, thereby keeping up the action of the remedy longer. How the carbolic acid cures this disease I will leave for wiser heads than mine to discuss. I am quite well satisfied, for the present, to know that it will cure it. During the treatment of this case I gave internally the comp. syr. stillingia with iod. pot., but I claim very little, if any aid, from the constitutional treatment.—*Medical Archives.—Southern Medical Record.*

SECONDARY SYPHILIS COMMUNICATED BY AN INFANT TO ITS NURSE.—Dr. Angus Macdonald reports a case in which secondary syphilis was communicated by an infant, suffering from hereditary disease, to its grandmother, a woman

59 years old. The affection appears to have been communicated by means of the tube of the child's nursing bottle, which the grandmother was in the habit of putting to her own mouth before applying it to the mouth of the child. The symptoms consisted of a severe sore throat and a general eruption on the skin, distinctly syphilitic in character.—*Edinburgh Medical Journal*, July, 1873.

A WAX CANDLE IN THE BLADDER OF A FEMALE.—This interesting case was observed a short time ago at the Hotel-Dieu, Paris. The patient, on admission, complained of intense pain in the abdomen. The urethra, abnormally dilated, easily admitted the finger into the bladder, when a hard, voluminous body was felt. The woman stated that, on account of great difficulty in making water, she had passed a candle through the urethra and had accidentally let it slip into the bladder. It was readily removed with a pair of pincers. The end of the candle, which had been rounded with a knife, was covered with calcareous matter gathered there during the five weeks the candle had stayed in the bladder. Speedy recovery followed.—*Boston Medical and Surgical Journal.*

THE TREATMENT OF BURNS AND SCALDS.—Dr. DeBreyne highly recommends the following treatment in *L'Union Pharmaceutique:* Hydrate of lime (newly precipitated), forty-five grains; glycerine, five ounces; chloric ether, forty-five drops. It makes up a transparent. colorless liquid, with an agreeable odor and an alkaline reaction, according to the amount of hydrate of lime. It calms the pain and prevents or abates the inflammation.—*New York Medical Reporter.*

IODOFORM FOR PRURIGO AND HEMORRHOIDS.—An ointment made of iodoform (ʒ i.) and simple cerate (℥ i.) will be found useful in many cases of prurigo. The following is recommended when piles are very painful, especially during defecation: ℞. Idioform, powdered, twenty grains; cocoa butter, ʒi. Melt and mix for suppositories.—*Southern Medical Record.*

Institutes and Practice of Medicine.

Clinical Lecture on the Medical Treatment of Gravel and Calculi.

BY JAMES TYSON, M. D.,

Clinical Lecturer on Microscopy, Urinary Chemistry, and Renal Diseases in the University of Pennsylvania.

In a previous lecture I asked your attention to the formation of urinary calculi, and the method for determining their composition—means so simple and easy of application that they should be familiar to every practitioner. To-day we will discuss the treatment of the condition incident to their presence and the tendency to their formation. None of you who have witnessed a case of nephritic colic, need be impressed with the importance of being able to relieve the painful symptons of this condition, or, still better, if possible, to prevent their occurrence.

The treatment naturally resolves itself into the *preventive*, the *solvent*, and that required during a *paroxysm* of nephritic colic. A hasty conclusion would seem to require that the latter two should be identical; but, when we come to consider the efficiency of the solvent treatment, we will soon discover that it is far too slow in its action to be relied upon when pain so severe as that caused by impaction of a stone is to be relieved.

I. Suppose, then, you are called upon to treat a patient in the agonies of nephritic colic, so called. Under these circumstances a small stone is supposed to have left the pelvis of the kidney and to be working its way through the long but narrow ureter, whose diameter is not greater than that of an ordinary knitting-needle, if as great. The evidence of such an attack is discovered in a degree of pain which is seldom surpassed in severity, and which, starting in the lumbar region, extends thence along the line of the corresponding ureter and groin to the testicle, which is often retracted. It is scarcely possible to mistake the import of such pain; and very likely the patient, from his experience in one or more previous attacks, will himself have made the diagnosis.

At this stage the composition of the stone is not of material importance. To relieve the pain is the urgent demand. Happily, means are at our disposal promptly to do this.

A hypodermic injection of one-sixth of a grain of sulphate of morphia, followed by hot poultices constantly kept up, will generally so far influence the pain as to give you at least a breathing-spell in which to prepare yourself for further action. Suppositories containing one-half grain of extract of opium, or a grain of powdered opium, with one-half grain of extract of belladonna, should be ordered, with directions that one shall be introduced into the rectum every three hours. A more frequent use will scarcely be of further service, since not more than the quantity named is likely to be absorbed in this time. A hot bath may also be suggested in case relief is not obtained, and the hypodermic injection may be repeated, if necessary, at the next visit.

A specimen of urine should be obtained, if possible, before the second visit, and examined microscopically. In a certain number of cases no information whatever will be derived from it. In others, again, you will promptly detect crystals of uric acid, sometimes large enough to be seen with the naked eye, in the shape of the so-called "red-pepper" grains; in others the microscope will detect octahedra and dumb-bells of the oxalate of lime. In the former instance you have a uric acid calculus to deal with; in the latter probably a small stone of oxalate of lime, though not necessarily, since a deposit of crystals of oxalate of lime sometimes attends uric acid concretion; but the probabilities of the oxalate composition will be greatly increased if the crystals, whether octahedra, or dumb-bells, tend to aggregate themselves, thus forming *microscopic calculi.* Whenever this has been the case, and I have subsequently obtained the stone for analysis, I have invariably found it to be composed of oxalate of lime. Phosphatic calculi are rarely the occasion of nephritic colic, since they are never found as primary stones in the kidney, nor indeed in the bladder; but are subsequently added to previous nuclei of whatever composition, in consequence of an alkaline reaction induced either in the whole mass of the urine or that immediately around the calculus, as the result of which the triple phosphate of lime are deposited in consecutive layers.

Should each examination of the urine lead to a conclusion that the offending stone is uric acid, large doses of citrate of potash may be administered in connection with the anodyne treatment, partly in application of the principle to be presently explained in connection with the solvent treatment, and partly with the hope that by flushing

the kidney with water, the concretion may be pushed onward towards the bladder. If the calculus be oxalate of lime, such treatment can only be justified by the latter motive, since to hope for its solution is futile.

Should the patient become nauseated in the course of the above treatment, you may assure him that such a result is really desirable, since the increased pain is often due to a spasm of the muscular coat of the ureter, as the result of which the stone is more closely grasped, while the condition of relaxation due to the nausea may aid in interrupting the spasm, and thus relieve the pain.

Supposing the attack terminated, the stone has either reached the bladder, or having established a temporary tolerance in some part of the ureter, remains quiescent for a time. In the former case it will probably be passed by the urethra, and, for the discovery of it, careful examination should be made; while in the latter it will inevitably excite another attack at some period more or less near.

II. It is with a view to dislodging such, as well as aiding in the escape of other stones which may be resting in the pelvis of the kidney, that the *solvent* treatment is used. By means of carefully conducted experiments by Dr. Roberts, of Manchester, England, author of the very useful practical book on "Urinary and Renal Diseases," we have arrived at quite accurate knowledge of our powers in this direction.

In the first place, however, let us recall the composition of renal calculi. For practical purposes it may be stated that three-fifths of all stones in the bladder have been found to be composed of uric acid or its compounds, two-fifths of phosphatic combinations, and three or four per cent. of oxalate of lime. But I have already said that phosphatic stones of small size rarely, if ever, exist in the pelvis of the kidney. It is only when calculi have reached considerable size, so that by partial occlusion of the ureter the urine has become backed towards the kidney, and in consequence of its accumulation has acquired through decomposition, a change in its reaction, that the phosphatic laminæ are deposited, and at this stage curative medical treatment is totally out of the question. Indeed, it has been proven that the nuclei of almost all calculi which have commenced their formation in the pelvis of the kidney are composed of uric acid or oxalate of lime; and in a large number of calculi composed of uric acid there is found to be an oxalate of lime nucleus.

The solvent treatment, therefore, resolves itself into attempts to dissolve calculi of oxalate of lime or uric acid and

its compounds. The general method of Dr. Roberts was to allow alkaline solutions to flow over stones soluble in alkalies—that is, uric acid, urates, and cystine (a very rare concretion)—at a rate stimulating that at which urine is supposed to trickle down from the kidney through the ureter; while acid solutions were caused to flow over those found soluble in acids, *i. e.*, oxalates and phosphates. The result of these observations proved that it is not impossible to produce some effect upon uric acid; that all attempts to dissolve oxalate of lime or mulberry calculus are futile; and that, although phosphatic concretions are susceptible to the action of acid solutions, the practical impossibility of producing through the system a sufficient degree of acidity of urine restricts the application of the principle to injecting the bladder with such solutions, with a view to acting upon phosphatic stones in that situation.

From this we learn that there is only reasonable possibility of acting upon uric acid and cystine with a view to diminishing their size by solution. The experiments of Dr. Roberts have also informed us what alkaline salts are most useful for this purpose. In the first place, he has shown that the potash salts are more efficient than the soda salts, and, secondly, that of these the carbonates are the most active. But it is well known that the citrates, acetates, and tartrates become converted into carbonates by the time they reach the kidney, or at least are eliminated as such; and in these we have preparations very much more agreeable, as well as more soluble and better borne by the stomach, than the carbonates themselves. They become therefore, the most suitable remedies to administer; and perhaps the citrate is to be preferred—especially if no purgative action be required; but the acetate may be interchangeably used. Of these salts of the vegetable acids forty to fifty grains may be given every three hours, freely diluted, say in three to four ounces of water, with lemon or other vegetable syrup added, if desired, to flavor; about six drachms of the salt should be taken by an adult in twenty-four hours. Of course liquor potassæ and the bicarbonate of potash come under the same category; so also the lithia salts; but there is considerable difference of opinion as to the efficiency of the latter, some vaunting them very highly, while others declare them inactive on account of their sparing solubility, and I have not had sufficient experience with them to be justified in giving an opinion.

Some interesting facts with which you should be familiar,

were developed by Dr. Roberts as to the strength of the solvent solution employed, since upon them is based the appropriate dose of the remedies. Thus, it was found that a strength of less than forty to sixty grains of the bi-carbonate to the imperial pint was very much more feeble, while, on the other hand, solutions containing more than sixty grains to the pint exhibited also a diminution in solvent power, which was finally arrested by the formation of a white crust of alkaline *bi-urate* on the surface of the calculus. With a solution of eighty grains to the pint this bi-urate crust was loose and easily detached, like a layer of whitewash; but with a solution of one hundred and twenty grains to the pint it was tenaciously adherent, and very little dissolution took place with carbonate of potash and none at all with carbonate of soda. With solutions of one hundred and sixty and two hundred and forty grains to the pint, there was no loss of weight with potash or soda; the fragments of stone became invested with a thin tough coating of bi-urate, resembling white paint, which put a stop to all solvent action.* The quantities of the vegetable salts above mentioned, and in the manner described, have been found by Dr. Roberts to produce the degree of alkalescence required; and he found further that when urine alkalized by the internal administration of these salts was passed over the surface of uric acid calculi at blood heat, the calculi underwent solution at the *mean rate of twelve and a half grains in twenty-four hours.* Such an exhibit at least merits a trial, and as far as my experience goes, the trial has been justified by the results.

The treatment should be kept up for a considerable length of time, but should be discontinued when an ammoniacal state of the urine is developed, since under this condition solution ceases, while on the other hand a disposition of mixed phosphates (triple phosphates of ammonia and magnesia and amorphous phosphate of lime) takes place on the surface of the calculus, and it of course becomes larger. The simple presence of amorphous phosphates, however, which are often observed, particularly after a meal, need be no contra-indication, since they do not interfere with solution and are not disposed to concretion. It is the ammoniacal state which is to be avoided. An interruption of the treatment should be enjoined at such times until the urine again becomes acid.

Such is the solvent treatment of uric acid gravel; and, if it be clearly borne in mind what alone is claimed for it, a

*Robert's Urinary and Renal Diseases, p. 240, First American Edition. Philadelphia, 1866.

power of partial solution or diminution in size of small calculi, so that they may more readily pass through channels ordinarily much too contracted for them, and not the destruction of large stones already in the bladder, there need be no dissapointment in its results. A stone in the bladder of considerable size should be turned over to the surgeon, who with his knife or lithotrite will make quick work of it.

You may perhaps wonder why I have said nothing about Vichy or other alkaline waters, which have not only had so much reputation in dissolving uric acid stone, but have also been used with such reckless indiscrimination in all calculus disease, without regard to composition or indication. I have purposely made them secondary, because I believe them to be very much less efficient than the alkaline citrates and acetates of potash, while they are more expensive and difficult of access. And in this I am only following the precept of one whose great experience in these maladies entitles him beyond all others to our respect—Sir Henry Thompson, who twenty years ago declared the "citrates and carbonates of potash are more potent and certain than Vichy water," and who says, so recently as 1873, "I have never at anytime prescribed Vichy water for any urinary affection* on the ground of its inferiority to the potash solutions." I think the citrate may be fairly said to be the salt which of all others offers the best chance of success; and this by common consent of all who have examined the subject." Compared with such authority as this, confirmed by the carefully conducted experiments of Dr. Roberts, my own testimony to the same end is of little value, except that it adds one more to the list of those "who have examined the subject." I might say of the Vichy water that the alkali which it contains is the carbonate of soda, and not of potash, and of the former salt there are forty-seven grains to the English pint.

III. But if much may be expected from the solvent treatment of gravel, more may be expected from the *preventive* plan. Here also for the reasons already stated, it becomes practically the preventive treatment of uric acid concretion and its congeners. And although it is the case that oxalate of lime calculi are quite insoluble in the solutions efficient in dissolving uric acid, and indeed in the system in any solutions, it happens that the circumstances attending their production are almost identical with those attending

* The Preventive Treatment of Calculous Disease, p. 58, Lindsay & Blakiston, Philadelphia, 1873.

the formation of uric acid, and that the preventive treatment of the latter becomes therefore the preventive treatment of oxalate of lime.

What, then, are the indications for the use of this treatment, by which we hope to prevent the formation of stone in the urinary passages? It is well known that urates, uric acid, and oxalate of lime crystals are occasionally found in the urine of individuals who are perfectly healthy. And you will many times be called upon to dispel the illusion based upon the appearance of "sediment" in the urine of a patient who is rendered unnecessarily wretched by that fact, and who is really in perfect health.

These deposits are apt to appear in urine, sometimes in considerable quantities, not only after an attack of indigestion, but also from defective assimilation even without symptoms of indigestion, and by whatever cause induced, whether from the gross disregard of the proprieties of eating, or the use of a single glass of wine to which one has not been accustomed. And oxalate of lime crystals are almost always found in the urine after a meal of vegetables containing oxalic acid, as of sorrel, tomatoes, or rhubarb. I have often told you that when I wish to obtain examples of the octahedra of oxalate of lime, for examination with the microscope, I always secure a good crop in my own urine by eating a full meal of the rhubarb or pie-plant, if it be in season; in a few hours after which, my urine is loaded with beautiful crystals of large size. I also know a medical gentleman who is unable to eat tomatoes, because of the crystals of oxalate of lime which appear in his urine, and give him pain in their descent to the bladder.

How, then, are you to determine the presence of the so-called "uric acid diathesis?" In the first place, by the persistence of the deposit, which is usually pinkish in hue, or gives to the urine a cloudy appearance which is dissipated by heat. And here I must again caution you against a deposit which always takes place when urine is cooled much below the temperature of the blood. The urates in health are usually present in the urine in such quantity that they are dissolved at the temperature of the body—that of the urine when it is passed—or even at a temperature somewhat lower. In cold weather, therefore, when the urine becomes cooled much below that point, a deposit inevitably takes place, which is usually found made up of the amorphous mixed urates of potash, soda, lime, and magnesia, and is physiological.

If, however, having observed the precautions suggested by the above facts, the deposit persists day after day, and you find upon inquiry, as you will be very likely to, that the patient's father or grandfather had attacks of "gravel" (for the affection is very constantly hereditary), you may conclude that you have a case of uric acid gravel. Or if the patient or his ancestors have had gout, you may be equally confident; because this is also well determined, that uric acid gravel and gout are identical in their causation. For, in addition to the fact that the gouty deposits in the joints are made up of mixed urates generally crystallized in acicular form, we have numerous cases in which an attack of gout alternates with one of uric acid, or one member of a family has gout and another uric acid gravel. Indeed, gouty patients almost always have deposits of urates and uric acid in their urine. Finally, I need only allude to the inference you may draw if the patient has already suffered an attack of nephritic colic.

Supposing the presence of such a condition determined, how will you manage it in order to prevent the final great evils, renal calculi or stone in the bladder? Here, as elsewhere, the foundation of a correct treatment must be a knowledge of its pathology. And what is the pathology of uric acid, and I may say also of oxalate of lime deposit? With one universal accord the persistent presence of these deposits in the urine is admitted to be indicative of deficient assimilation. From some cause or other, food which should be worked up into completely soluble substances stops short at principles which are most insoluble, and which, therefore, are deposited, in the crystalline shape alluded to, in the tubules of the kidney and pelvis of the organ, where they act as foreign bodies, causing irritation and pain, and in their aggregation form the calculi the transit of which to the kidney causes so much suffering. Attending this condition is often found a so-called torpor of the liver and bowels—that is, a condition which, whatever its true nature, is attended with deficient excretion into the alimentary canal.

Under these circumstances the kidney is already overworked in its attempt to remove from the blood these insoluble and irritating substances, and the indication is to relieve it by throwing the work, or a part of it, on some other organ. It is not sufficient to administer Vichy water or other alkaline substances, which by dissolving the uric acid and urates simply hide the enemy without preventing its presence. Such a course is aptly compared by Sir

Henry Thompson to that of the fabled ostrich which is said to bury its head in the sand when pursued, and believes itself secure because it no longer sees its enemy. There may be, it is true, palliation of symptoms by such treatment, and the patient may be for the time relieved as well as comforted by the fact that he no longer *sees* the deposits, but they will often return when the remedies are discontinued.

This is, of course, admitting a purely *chemical* action of alkalies in promoting the solution of uric acid; but it is too sweeping an assertion with regard to the valuable citrates, tartrates and acetates previously alluded to, which have been shown by Drs. D. Campbell Black, Basham, and Geo. Harley to have something more than an action of this kind, and to possess also, when administered, an important *physiological* action through which the oxidation processes of the economy are much increased, so as to transform the slightly soluble uric acid into the highly soluble urea—apparently through an increased activity of all the digestive functions. Nor is this effect overlooked by Thompson, who alludes to it in claiming the superior efficiency of the citrates and tartrates over Vichy and similar carbonated waters.

[Concluded in the next number.]

Yellow Fever in New Orleans in 1873—Its Spread Arrested by Disinfectants.

Dr. Alfred W. Perry, Sanitary Inspector of New Orleans Board of Health, states (*New Orleans Med. and Surg. Journal*, November, 1873,) that yellow fever was introduced into New Orleans, July 4th, by the mate of a Spanish vessel from Havana, which arrived on the 26th of June, and the disease then slowly spread. "During the first week in August the Board of Health commenced extensive disinfection with carbolic acid of all places where yellow fever had been reported. The disinfection was performed in two different ways, viz.: when a case of yellow fever was reported, all the yards, alleys and drains in the square were sprinkled with carbolic acid by hand sprinkling-pots; about seventy gallons of the carbolic acid were used per square. This was done to destroy any disease-germs that might be on the ground and to prevent the spread of the disease-germs over the other parts of the same square. Thirty entire

squares and twenty-one half-squares where yellow fever had occurred were thus disinfected in the Fourth District, and in only seven of these areas disinfected were there any subsequent cases of yellow fever."

The streets were also disinfected with carbolic acid by sprinkling water-carts. Nowhere in the world, Dr. P. says, has disinfection on so extensive a scale been used. "In sprinkling the streets, about twenty gallons were used to every one hundred yards; this was repeated several times at intervals of five to ten days. The large amount of carbolic acid used made the air of a disinfected locality exceedingly irritating to the eyes, and sometimes produced headache and nausea. These disagreeable effects are due to the naphtha and naphthaline, which constitute the impurities in the crude carbolic acid; these have no disinfecting value, and in future a purer acid should be used, which is not very unpleasant and equally effective and cheap." He further says that a few cases occurred in Mobile and the disease was extinguished by the same method.—*Medical Times.*

Another Hemostatic.

Dr. A. Given, of this city, writes us that in pulmonary hemorrhage he has found no agent equal to the witch-hazel (*Hamamelis Virginica*). He gives it in the form of fluid extract (Tilden's), though he says a strong decoction is almost equally efficacious. It seems speedy and safe in its action, though it is so powerful an astringent that laxatives are demanded, if it be given for any length of time. Dr. G. mentions among others the following cases, which will serve to illustrate the mode of using and behavior of the drug:

Case 1. A patient with alarming hemoptysis, to which he had been subject, took a teaspoonful of the fluid extract of *ham. virg.* In less than ten minutes the hemorrhage diminished and soon ceased. The medicine was taken three times a day for a fortnight. Some weeks after the patient died from hemoptysis before aid could reach him.

Case 2. A young lady, aged eighteen, spit blood every two weeks during a period of two years. In a more than ordinarily severe attack, the hemorrhage was quickly arrested by a dose or two of the witch-hazel. The medicine was then administered, first three times a day, then

once a day for several months, since which time, now two years ago, she has had no trouble.

Case 3. A maiden lady, the subject for several years of hemoptysis, took in one of her seizures, opium, lead, turpentine, and some other remedies without avail. The bleeding continued throughout the night and was more profuse on the following day. I now administered the witch-hazel in doses of a teaspoonful every twenty minutes. The hemorrhage ceased after the third dose.—*American Practitioner*, January, 1874.

Secondary Disease of Both Pneumogastric Nerves in the Course of Typhoid Fever.

Dr. Zurhelle relates (*Berliner Klinische Wachenschrift*, No. 29, 1873,) the case of a man who, in the second week of an attack of fever, was seized with severe pain at the level of the cornu of the thyroid cartilage on the left side (and later also on the right), which seriously impeded deglutition. The voice was clear and remained so. Nothing abnormal could be detected by examination with the laryngoscope or externally; but the pain was much increased by pressure in the direction of the spine. In the further progress of the disease, attacks of vertigo and palpitation set in, while the pulse became irregular and sank to 36 in the minute. Later on, there were frequent attacks of syncope, with clonic convulsions and profuse vomiting. The fainting fits were diminished by morphia injections; but, while the temperature was still high, the pulse remained irregular, less than 40 in the minute. Pneumonia of the left side now set in, and with it paresis of the recurrent nerve on both sides, as ascertained by the laryngoscope, and hoarseness. Under the use of iodide of potassium, the violent pain on both sides of the neck at once disappeared; the heart-beats became more regular and frequent, but hoarseness, due to paresis of the left recurrent nerve, remained.—*British Medical Journal.—Philadelphia Medical Times.*

Weeping in Children.—M. Trosseau considers it worthy to be considered as an aphorism that an infant is not dangerously ill so long as it sheds tears; and that, on the contrary, absence of weeping indicates a severe disease. He, however, admits that exceptions may occur to this general rule.

Caoutchouc Electuary as a Remedial Agent.

Dr. Theodore Varick, after having for fifteen years prescribed caoutchouc in preference to cod-liver oil in certain cases of pulmonary tuberculosis in every stage, in chronic bronchitis, the winter coughs of old people, and in chronic rheumatism, desires to call attention to its use as a remedial agent. It is not claimed that it is a remedy which has any specific action, but that it diminishes excessive mucous secretion and suppuration, arrests hemorrhage and colliquiative sweating, and retards emaciation.

Prepared in the following manner, it should be given in doses of a teaspoonful three times a day, about two hours after meals:

℞ Caoutchouc (in thin slices), ℥i;
Olei terebinthinæ, f℥ii.—M.
℞ Sol. caoutchouc, fʒii;
Sacch. ald., f℥iss;
Mellis (strained), f℥iiss.—M.

When these preparations are mingled, the mixture (containing about two grains of caoutchouc to the teaspoonful) should be of an opaque yellow color and thick enough to run very slowly from a spoon. One hundred parts of caoutchouc contain 87.2 carbon and 12.8 hydrogen, while cod-liver oil contains of carbon 37 and hydrogen 34—; so that should the former be available as respiratory force or fuel, it would be of great value.—*Medical Times.—New York Medical Record,* November 15th, 1873.

Preservation of Organic Substances by Means of Fuchsine.

Gelatine putrefies with the greatest facility at a temperature of 25 degrees, forty-eight hours only being required for it to become covered with mould, to liquefy, and undergo complete decomposition. If to a solution of gelatine is added a fifth part of fuchsine, it can be preserved in the open air during an indefinite period. A piece of beef, weighing fifty *grammes,* has been enveloped in blotting-paper moistened with a solution of an hundreth part of fuchsine. This piece of meat has been exposed to the air for several months, and has as yet undergone no alteration.

Urine, to which one-forty-thousandth part of analine violet had been added, was placed in a test-tube in contact with the air, and at the end of six months had undergone no putrefaction.—LANJEROIS, *Revue de Therap.,* No. 9.

Gynecology and Diseases of Children.

SAN RAFAEL CLINIQUE.

A Case of Puerperal Fever successfully treated by Opium and Veratrum Viride—A Relapse on the Seventh Day and a Profuse Critical Perspiration on the Fourteenth—Above 500 Grains of Opium and 200 Minims of Veratrum Viride being used in Twenty-one Days.

Some months ago I published in the "Clinique" a case of puerperal fever treated by opium and veratrum viride; I now present one, having, it seems to me, many points of interest.

November 30th, Mrs. B., æt. 30—the mother of one child, was taken with labor pains. She was delivered of a healthy child at 6 A. M. the next day, after an easy labor. December 2d, at 12 at night, 42 hours after confinement, she was seized with a chill which was attributed to the room having no fire-place, and to the window having been partly open. At 6 A. M., December 3d, I found her still chilly, the abdomen tympanitic, and pain on pressure over the uterus and right broad ligament; the pulse was up to 120 and had been higher; respiration about 20; tongue clean, and tip and edges very red.

For a few hours I temporized with digitalis and small doses of morphia and Dover's powder; applying turpentine stupes to the abdomen, and then finding by a vaginal examination that the right broad ligament was considerably enlarged, and that the tenderness was rapidly creeping over the uterus toward the ligament on the opposite side, while the uterus itself was dry, but not swollen. I applied ten leeches over the right broad ligament, and enveloped the abdomen in a warm stupe. Convinced now, from a consideration of all of the symptoms, but especially from the frequency of the pulse, and from its peculiar quick, feeble beat, strong at one moment, and the next almost extinguished under the finger, that I had a case of

commencing inflammation of the serous membrane covering the uterus and the right broad ligament, to deal with; I decided to place her on opium and veratrum viride. From six in the morning until ten at night I had given her digitalis and several grains of morphia, the pulse all the time running up. I now substituted veratrum viride (using Norwood's saturated tincture and McMunn's elixir of opium) for the digitalis, Dover's powder and morphia before used. It will be seen from the following table that the original attack yielded to a moderate amount of opium and veratrum, only about fifty grains of the former and about sixty minims of the latter being used:

Chill forty-two hours after labor, at 12 P. M.								
First day	Pulse,	130-100	Digitalis, 60 ms.	Ver. Vir.,	20 ms.	Opium,	16	grs.
Second day	"	113- 50		"	14 "	"	13	"
Third day	"	92- 66		"	15 "	"	11½	"
Fourth day	"	90- 80		"	3 "	"	2	"
Fifth day	"	88- 82		Stimulants				
Sixth day	"	102- 72		Ver. Vir.,	4 "	Opium,	4½	grs.
Chill during night.								
Seventh day	"	104- 98		"	3 "	"	10	"
Eighth day	"	100- 85		"	12 "	"	18½	"
Ninth day	"	98- 82		"	5 "	"	9	"
Tenth day	"	124- 96		"	20 "	"	38	"
Eleventh day	"	108- 72		"	10 "	"	33	"
Twelfth Day	"	128- 90		"	8 "	"	58	"
Thirteenth day	"	110- 60		"	11 "	"	38	"
Fourteenth day	"	95- 55		"	18 "	"	46	"
Heavy critical perspiration for four hours.								
Fifteenth day	"	110- 65		Ver. Vir.,	26 "	"	64	"
Sixteenth day	"	106- 45		"	11 "	"	80	"
Seventeenth day	"	104- 70		"	7 "	"	9	"
Eighteenth day	"	106- 90		Stimulants				
Nineteenth day	"	112- 86		"		Opium,	4½	"
Twentieth day	"	112- 89		"				
Twenty-first day	"	116- 76	Stimulants	Ver. Vir.		Opium,	2	grs.
Twenty-second day	"	95- 65	"					
Twenty-third day	"	82- 75	"					
Twenty-fourth day	"	82- 76	"					
Twenty-fifth day	"	81- 68	"					

At 10 P.M. passed urine without the aid of the catheter, for the first time since the attack.

The above is an approximation only, and accounts for about 460 grains of opium and 190 of veratrum. There were used during the case, thirteen ounces of McMunn's elixir of opium, 24 grains of crude opium, and one ounce of Magendie's solution of morphia, equivalent to 572 grains of opium, and 240 minims of Norwood's veratrum viride. The difference between the total of the table and quantity expended is to be accounted for by small losses, and by use in enemata, etc., which the attendant neglected to record. I think, then, that I can safely fix the amount of opium taken as at least 500 grains, and of veratrum as over 200 minims.

On the sixth day the pulse came down to 72 under the use of small doses of opium, and I felt convinced that the disease was safely in hand. Unfortunately during the night the attendant neglected to keep up the alcohol stove, which I had caused to be placed in the room, and the result of this negligence was a second severe chill, causing an increase in the quantity of opium and veratrum viride necessary to keep the pulse within bounds. Meanwhile the inflammation attacked the serous coverings of the left broad ligament, as was shown by occasional vaginal examinations, still a moderate quantity of opium and veratrum answered. On the tenth day the body of the uterus was much swollen, and the os much enlarged and painful on pressure. An increased amount of both drugs was now necessary to keep the pulse down. Frequent cold chills were complained of, followed by cold perspiration. These I considered as signs that the uterus was itself attacked. I caused the stupes to be constantly changed, had the sheets removed from the bed, and the body clothed in flannel. The quantity of opium varied now. Thus on the tenth day 38 grains was used; on the eleventh, 33 grains only; on the twelfth, 58 grains; on the thirteenth only 38 grains. From the fourteenth to the sixteenth the quantities ran rapidly up; first on the fourteenth to 46 grains, on the fifteenth to 64 grains, and on the sixteenth to 80 grains. On the fifteenth the veratrum given amounted to 26 minims. After the sixteenth the force of the disease abated. Thus on the seventeenth day only 9 grains of opium were required. The uterus now rapidly lessened in size, the vagina became moist. Between the fourteenth and fifteenth there was a profuse warm perspiration that drenched the clothes and lasted several hours; still, it will be observed that the opium and veratrum had to be increased. This perspiration seemed critical; the patient felt better for it. She had afterwards cold sweats which required careful watching to prevent their causing chills. After the seventeenth day the opium and veratrum may be said to have been stopped. From the first to the fifth day of

the disease, no food of any kind was given. After this, small quantities of beef tea and raw beef juice only, and stimulants according to the pulse. From the eighteenth day stimulants were freely given in the form of brandy, sherry, port and porter—quinine and cinchona were also used. On the fourth day an enema was given, which not acting, $\bar{x}$ grs. of calomel and a tablespoonful of castor oil were administered. These operated three times, bringing down the pulse. On the eighth day I also repeated the calomel and oil; on the fourteenth day the bowels were opened by an enema; much pain was experienced at stool and a little blood passed; no urine was passed except by the use of a catheter for twenty-five days. I believe that slight adhesions existed between the uterus, bladder and rectum, which were broken up.

In conclusion, I have a few remarks to make about the use of opium and veratrum, and first of opium. The quantity given, even where 80 grains were taken in twenty-four hours, did not produce sleep, did not contract the pupils to any extent; indeed, throughout the disease the pupils remained about half the usual size, and I could perceive no effect on them of the opium given. Sometimes when I appeared to be loosing control of the pulse by opium, a few doses of veratrum viride would once again bring it under the power of moderate doses of that agent. I might perhaps with opium alone have controlled it, but the quantity of that drug that would have been required, would have been very great.

With regard to veratrum, I found it best to commence with full doses, giving one of 6-8 minims at first, and then a drop or two every hour, until the pulse began to fall—it usually continued to fall for some three hours, and I was frequently compelled to give opium and stimulants. I believe the veratrum acts better after it has vomited, but subsequently I prefer to use only just enough to produce slight nausea from time to time, and to control the pulse if it still runs up with opium.

Many remarks might be made in this connection. I will conclude, however, by saying, that in my belief the 500

grains of opium used would have amounted to over 1,000, had that agent alone been used in this case; while had veratrum viride been solely made use of, much nausea and vomiting I believe would have been produced, followed by great prostration, and I doubt greatly if the pulse would have been held sufficiently within check. Both, like the snaffle and curb when used together, controlled the force of the hearts action, without unnecessarily undermining the strength.

Since the above was written, the patient has rapidly regained her strength, and has since undergone a slight surgical operation for the removal of a tumor, and has recovered from this also, and is now daily out of doors.

Treatment of Puerperal Convulsions.

BY C. T. DEANE, M.D., PROFESSOR DISEASES OF WOMEN AND CHILDREN, UNIVERSITY OF CALIFORNIA.

I notice in the January number of the LANCET an article entitled "Notes on the Treatment of Puerperal Convulsions," copied from the *N. Y. Medical Record.* As the writer truly observes, "The wildest emotions are exceedingly apt to be manifested, and it is towards the medical attendant that all eyes are turned for assistance." Anything new, or supposed to be new, should, in all cases, be published, particularly if it can effect any good in such a fearful accident as that under consideration. If any further proof were necessary to substantiate this remark, it would be furnished in the variety of treatment recommended by half a dozen of the first names in the country.

In the article referred to, Dr. T. Galliard Thomas says: "Venesection and chloroform are the two means for stop-"ping these kind of convulsions. *Now bring on labor and* "*remove the child as soon as you can do so safely*; but you are "not obliged to deliver immediately. * * * The "patient being under the influence of chloroform, if the os is

"closed, the warm douche may be used, throwing a stream "of warm water against the cervix for twenty or thirty "minutes at a time to favor the softening and dilatation. "*The process of dilatation may mostly be left to nature, and* "*within six or eight hours the os may be found to be dilated to* "*the extent of an inch and a half or two inches in diameter.* If "the pains are of moderate severity, *the case may be left to* "*nature chiefly*, until dilatation has taken place sufficient to "admit of the use of the forceps or a resort to version, and "either of these operations will be performed according to "the circumstances of the case. *There is generally no hurry* "*about delivering, for the woman is under the influence of* "*chloroform.*"

Now, here we have in the treatment of puerperal convulsions at the time of labor, several contradictions. In the first place, Dr. Thomas says: "Now bring on labor and remove the child as soon as you can do so safely;" again: "*The process of dilatation may mostly be left to nature.*" Does Dr. Thomas mean us to understand, that while a woman is suffering, or threatened with puerperal convulsions, that we can leave the dilatation of the os to nature? or does he intend to sit quietly by such a case and administer chloroform for six or eight hours? "There is generally no hurry about delivery, for the woman is under chloroform." So the reiteration that the woman is to be kept under chloroform for any number of hours she may be in labor, I think is dangerous and absurd. To sum up the treatment of Dr. Thomas in a few words, it is as follows: Hurry up your delivery; leave labor to nature; no hurry about delivering; in six or eight hours the os will be dilated from one and a half to two inches; continue to give chloroform. He does not say a word of the convulsions that take place after delivery and sometimes continue for thirty-six hours. Does he intend to continue the chloroform?

Professor Edmund Peaslee says: "Next, in every possible way hurry up labor." He then goes on and says, "if the os is closed, the different means we have at our disposal to

dilate—sponge tents, Barnes' Dilators," etc.—but finds fault with all these because they are too slow, and advises passing the hand into the vagina and dilate the os and cervix with the fingers. He then says: "We can wait for a time to see what nature will do, but if the head does not come down so as to put on the forceps, deliver by version." Dr. Peaslee clearly does not agree with Dr. Thomas.

Professor Loomis recommends the hypodermic use of morphine, and thinks chloroform unnecessary.

Dr. Anderson, ex-president of the Academy, thought that "vent must be given somewhere." He had had only partial success with ether inhalations, but xx grs. of calomel, followed by an injection of turpentine and soapsuds, was all-powerful in his hands.

Dr. Baxter was heartily sick of chloroform, but relied upon an infusion of digitalis in ℥ss. doses every two or three hours and blood-letting.

Lastly, Professor White, of Buffalo, believes in opium by enema, but not hypodermically; does not believe in calomel; rather doubts the efficacy of bleeding; but croton oil he believes in, as "it irritates the mucous membrane of the entire intestinal canal, and in this way operates as a revulsive."

If it is possible to get a more various and unscientific treatment than the above for any disease, we should like to know it, and certainly the remark with which this article was begun, that we should publish all facts in relation to this disease, is in the most potential sense true. I do not wish it to be understood that I pretend to put forward what follows as the *par excellence* of treatment, but merely as another, and, as far as I know, a more safe and certain means of controlling what all feel, who have had to attend a case of the kind, a fearful accident.

Puerperal convulsions, few doubt, can be controlled by the administration of chloroform, but the idea of giving it for several hours is, to say the least, dangerous, and demands the constant presence of the medical attendant. While all admit the propriety of this during labor, there

are few who have the time to remain with the patient during twenty-four or thirty-six hours after labor, which this state necessitates. Now, what we require is a drug which will act on the nervous system in the same manner as chloroform, without its danger or loss of time, and this we possess in chloral hydrate. I have had, since its introduction to the profession, some four years since, quite an extended experience with it, having given it in hundreds of cases of obstetrics, and so far without a single accident. When I expect puerperal convulsions, I commence as soon as I am called to put the woman under its influence, giving 15 grs. every twenty minutes until sleep is produced (it does not interfere at all with the progress of labor), and I keep up the action of the drug for twenty-four or thirty-six hours after labor has finished; very often the albumen will all have disappeared from the urine in that time, and we have no further fear of the return of the convulsions. If a convulsion should come on, I administer chloroform while it lasts. As to the delivery, I always deliver as soon as I possibly can get the child; but I cannot imagine a physician sitting quietly by, while his patient is threatened with convulsions, leaving everything to nature, and simply administering chloroform, while he has so many resources at his disposal to hurry up labor and thereby get rid of the exciting cause that is threatening the life of his patient.

I would say, in conclusion, that last month I gave a lady 250 grs. of chloral hydrate in thirty hours, controlling perfectly the convulsions, and she made an excellent recovery. On the morning of her delivery (by forceps), the test-tube was half full of albumen; in forty-eight hours there was not a trace.

Puerperal Amaurosis: Its Importance as a Symptom.

Dr. H. W. Williams, of Boston, gives two cases of this form of disease, occurring in his own practice, and adds four that have already been published by Dr. F. Weber, of St. Petersburg. He believes that puerperal amaurosis

has some relation with puerperal convulsions, though he does not regard the former as invariably the forerunner of the latter. Indeed, eclampsia occurs far more frequently, and often precedes the blindness. Yet the occurrence of amaurosis during parturition should be regarded as a symptom of grave importance. The presence of albumen, though it frequently occurs, does not seem to have an absolutely determinative influence; it is absent in some cases, and in others may outlive the amaurotic symptoms. Primiparæ are seldom attacked, while the reverse holds true with regard to eclampsia. Fortunately, an attack of the disease at one puerperal period does not involve the probability of its occurrence at any subsequent one.

Dr. Williams does not recommend any special treatment in these cases, though he advises his patients to avoid any unusual fatigue or exertion that may induce cerebral congestion; and if amaurosis occurs, advises great watchfulness on the part of the physician to arrest, if possible, puerperal convulsions.—*Boston Medical and Surgical Journal*, October 16, 1873.

Treatment of the Flexions of the Uterus.

BY THOMAS SAVAGE, M.D., BIRMINGHAM.

The cases were taken from the out-patients seen by Dr. Savage at the Hospital for Women, and were limited to flexions of the nulliparous uterus. The object of the paper was to advocate the use of an intra-uterine stem. In all cases where recourse was had to this plan, the symptoms were improved, and great relief was given without any of the dangerous or serious after-effects which are sometimes said to arise. Even in the case of the unmarried, the symptoms were so severe, the relief from the instrument so marked, that Dr. Savage did not think it right to withhold from such patients the benefit of treatment advocated. Dr. Savage had used intra-uterine stems for retroflexions and anteflexions in forty-four women who had never been impregnated, and in not one had any ill effect followed. The discharge, slight as a rule, even when profuse, had not been found troublesome, and could be kept in check by the frequent use of ordinary stringent injections. It had always seemed to disappear on the use of the instrument being discontinued. Dr. Savage had tried the

galvanic stem as usually sold; also the modification of it, as suggested by Mr. Lawson Tait—*i. e.*, with a bulbous extremity, the plain vulcanite stem, Dr. Greenhalgh's stem, one devised by Mr. Ross Jordan, with a perforation near the extremity, through which was passed a thread of india-rubber, after the manner of the winged catheters; but the tendency of all was to slip out. Dr. Chamber's stems seemed most likely to remain in without other assistance, but in two instances they too escaped. The padlock of Dr. Graily Hewitt was, in some cases, an admirable contrivance, and most frequently remained *in situ*. The best means to adopt was to insert the stem, and keep it in place by a shelf-pessary cut small, or a small ring elongated and moulded to the size and shape of the vagina. The supports of Dr. Wynn Williams seemed to be very useful. It did not seem at all clear why the stem slipped out in a few hours in one patient, while in another it was retained for weeks or even months. Dr. Savage gave some illustrative cases.—*Obstetrical Journal*, November, 1873.

ANOREXIA HYSTERICA.—At a recent meeting of the Clinical Society of London, Sir Wm. Gull called attention to a form of disease occurring in young women between the ages of fifteen and twenty-three, and characterized by extreme emaciation, which was often supposed to be due to latent tubercle, mesenteric disease, or so-called atrophy. He believed the cause of the affection to be central, not peripheral, and in using the word hysterical, did not wish to be committed to its strict etymological value. The clinical characteristics of this disease are those of starvation only, and the diagnosis is to be made from the slowness of the pulse and breathing, the slightly-depressed temperature, and the absence of any sign of visceral disease in the chest and abdomen. In the treatment, if possible, a change in the domestic relations should be made, food should be given at short intervals, and the patients should not be left to their own inclinations in the matter. If the exhaustion reached an extreme point, external heat might be required; but the principal dependence should be placed upon controlling moral influences and upon feeding. —*British Medical Journal*, November 1, 1873.—*Philadelphia Medical Times*, December 12, 1873.

Ophthalmology and Otology.

Case of Intra-Ocular Tumour.

BY GEO. H. POWERS, M. D., SAN FRANCISCO.

On the 10th of September, 1873, Mr. S., aged 36, an active business man, was disabled by an attack of rheumatism, affecting the right knee joint, and accompanied by pain in and about the right eye. So far as he knew, the vision of that eye was always normally acute, and he noticed no change in that respect until the 13th, when there was an appearance as if a curtain were drawn gradually over the eye, and acute vision was rapidly diminished.

I was called by the attending physician on the evening of the 16th, at which time there was severe pain in the eye and temple, great injection of the sclera and conjunctiva, turgidity of the iris, and vision was reduced to perception of light, the patient being unable to count fingers or even to see where I stood, when his left eye was closed. The pupil was moderately dilated and immobile, from the use of belladonna previously applied by the physician in charge. With the ophthalmoscope nothing was to be seen except that the lens was still transparent; behind the lens was a uniform absence of color or form.

I considered it a case of rheumatic inflammation of iris and sclera, accompanied by great effusion or hemorrhage into the vitreous, and gave a favorable prognosis. Beside the usual treatment for rheumatism, a strong solution of atropia was dropped into the eyelid at frequent intervals, hot water fomentations applied, and hypodermic injections of morphia given at night. At the end of two weeks the pain had ceased both in knee and eye, but there was still considerable injection; the pupil did not dilate under atropia beyond a very moderate degree, and the ophthalmoscopic appearance was unchanged, although the patient felt quite sure that the light seemed much brighter. He

was ordered large doses of iodide of potash, generous diet, country air, and to continue the atropine instillations.

October 10th—He returned to the city vastly improved in general condition, but with no change in appearances of the eye, except a lighter hue of the opaque mass behind the lens.

I then asked Dr. Barkan to see the case in consultation, as it was very evident that the result was to be more serious than I at first anticipated. We found the condition of the eye as above noted, and, in addition, there was a marked decrease of tension, which I had not previously found. We were also in doubt, at this time, whether the lens was commencing to become opaque, and began to discuss the possible existence of a tumour, though there was nothing to point directly to such a cause for the existing symptoms.

At the suggestion of Dr. Barkan, I ordered a course of mercurial inunctions, which were kept up until the gums were decidedly touched.

At midnight of the 15th, there was a paroxysm of most intense pain, which yielded to the hypodermic injection of morphia.

On the 16th we found the tension decidedly *increased*, and great tenderness in the ciliary region; otherwise no change.

October 21st—At 2 A. M. there was another sudden access of intense pain, following which the tension became about normal, and the ciliary tenderness disappeared.

October 22d—We found the tension again diminished, injection of sclera less, lens clear, all behind the lens of a milky whiteness, vision reduced to a mere perception of light and shadow; at the bottom of the posterior chamber, that is, by looking downward through the pupil and behind the iris, there appeared, for the first time, a line of red vessels closely laid together and somewhat raised.

In view of this evident rapid process of disease in the ciliary region, we advised and urged the patient to submit to enucleation. After further consultation he consented,

and the operation was performed on the 24th, to the great relief of the patient, who seemed not to have realized how greatly he had suffered until he felt the contrast between constant pain and the ease and comfort which awaited his recovery from the effects of the ether.

After the eyeball had been hardened by immersion in Müller's fluid, it was divided by a perpendicular section made through the optic nerve entrance and the centre of the cornea and showed lens normal; vitreous so disorganized that it escaped, a thin fluid, incoherent, at the first incision; choroid *in situ*; retina also *in situ*, except in its anterior portions, where it was raised up by a foreign growth, which sprang from the ciliary body and choroid and extended, as an opaque membrane, across the whole posterior surface of the lens, developed, in its lower half, into a tumor about two lines in thickness. The microscope showed this growth to consist of irregular, uncleated cells, surrounded by granular matter, and I consider it a sarcoma choroidæ.

It is impossible to ascertain, although the patient was a gentleman of unusual intelligence and habit of observation, whether the vision of the affected eye had been fully normal up to the time of the rheumatic attack, as he had not noticed any failure or change in that respect. It is, therefore, vain to speculate whether the tumor was already developing before that attack, and whether the affection of the eye and of the knee had any common origin, any connection, or were merely coincident.

I should have stated that the left eye had commenced to show signs of sympathetic affection, and that vision was reduced to 20-40 the day before the operation, but was quickly regained after the disease was removed, proving that the enucleation was not resorted to too soon for the patient's safety.

Coste, the celebrated naturalist, was almost sightless at the time of his death, having destroyed his vision with the microscope. At the time of his decease he was sixty-six years of age.

Malignant Disease of the Ear, With Paralysis of Some of the Cranial Nerves.

BY GEORGE C. HARLAN, M.D.,
Ophthalmic and Aural Surgeon to the Children's Hospital.

E. C., three years of age, was brought to the dispensary of the Children's Hospital to be treated for a disease of the left ear. She had had scarlet fever a year before, and had not been in good health since. About three months before, she had become restless, slept badly, and seemed in pain, and within two months attention was for the first time called to the ear by a slight bloody discharge. Soon after this it was noticed that she had pain in swallowing, that the parts about the ear were swollen, and that the face was drawn to the right side when the child cried. Her appetite failed, and she became very feeble.

At the time of examination, August 4th, there was a slight amount of thick purulent discharge in the meatus, on removing which, a large, firm, rounded polypus, the size of a pea, or larger, was found blocking up the meatus. There was a fluctuating swelling beneath and behind the auricle. When the polypus was removed, by means of Wilde's snare and the rectangular forceps, there was a considerable discharge of sanious pus, increased by pressure on the external swelling. A free incision of the external swelling gave exit to a copious discharge of offensive pus. No dead bone could be detected by the probe. The left side of the face was swollen and puffy, and the mouth much distorted to the right side in crying. The left eye was never closed, even in sleep. The conjunctiva was free from congestion, the pupil movable, and the cornea clear and bright. There had been a convergent squint of the right eye of long standing, but the mother said this was increased, and the left eye was also inverted. The left half of the tongue was much swollen and rough, in strong contrast to the right, which was normal.

August 8—The polypus had grown again nearly to its former size, and was again removed by forceps without pain and with only a few drops of blood.

August 20—The polypus had grown again to its former size. The incision behind the ear, which had been kept open with difficulty by tents, was now gaping, and a fungous growth appearing in it.

On August 29th the polypus had become strangulated and sloughed off, and the external tumor had grown to the

size of a walnut. There was a free discharge of healthy pus by the side of the tumor.

The upper lid was now immovable, and nearly closed, the conjunctiva injected, and the cornea dimmed.

September 1—The tumor had increased to the size of a hen's egg. It was lobulated and had a bright-red granular surface.

The upper lid was now quite closed; the conjunctiva was much congested, and the whole cornea was hazy and its lower fourth infiltrated. The convergent squint had nearly disappeared. There was a free sanious discharge from the *right* nostril.

September 17—There was a penetrating ulcer of the cornea with protrusion of the iris; as the patient's mother aptly expressed it, "the eye seemed to be melting away."

September 21—The child was breathing with difficulty through the mouth and the right nostril, which was much dilated and expanding and contracting laboriously.

She died September 25th, apparently of exhaustion. No post-mortem examination was permitted beyond the removal of the tumor. The bone at its base was found roughened and eroded.

The tumor was exhibited to the Pathological Society, and pronounced by the Committee on Morbid Growths, to be a round-celled sarcoma.

The chief points of interest in this case are afforded by the nerves involved in the disease.

Such extensive destruction of the walls of the tympanum could not well occur without affecting the portia dura in its passage through the aqueduct of Fallopius, and causing the complete facial paralysis which appeared among the earliest symptoms. The difficulty of breathing was evidently much increased by the loss of the respiratory action of the left nostril, and the excessive action of the right nostril was painfully apparent. It is known that section of both facial nerves in the horse will cause the animal's death from suffocation; and we may well suppose that so young a child would find greater difficulty than an adult in breathing through the mouth.

Paralysis of the sixth nerve increased the convergent strabismus, which was corrected, and the ball rendered immovable when the disease extended to the third.

The levator palpebræ was at the same time involved, and the eye, which had been held widely open in consequence of paralysis of the orbicularis, was now closed by falling of the lid.

The inflammation of the conjunctiva and cornea which appeared at this time, presented a typical case of neuro-paralytic ophthalmia, without doubt due to paralysis of the fifth, or of its ophthalmic branch, and a point of special interest is the fact that the destructive inflammation of the cornea did not commence until after the ptosis had completely closed the eye. This excludes the theory that the affection of the cornea in such cases is always due to the mechanical injury of external irritants of whose presence the eye has been rendered unconscious. Though much weakened of late, and by some now abandoned, this theory was at one time generally admitted to be well established. Soelberg Wells speaks of it as "uncontrovertibly proved by the experiments of Snellen and others."

The free muco-sanious discharge from the right nostril was a singular phenomenon, no other symptom of nerve-lesion having appeared on that side. An increased discharge from the nostril of the affected side has been noted by experimental physiologists after section of the fifth nerve, but there was no excessive secretion from the left nostril in this case.

A similar increase of nasal secretion on the side opposite to the injury is noted in a case of injury to the sympathetic nerve in the neck, reported by J. F. Payne (St. Thomas's Hospital Reports, vol. iii., new series).

There is a bare possibility that the hypertrophy of the left side of the tongue might have been congenital. But this does not seem likely, as it was so marked that it scarcely could have escaped notice, and the child was otherwise perfectly symmetrical. Though the chorda tympani was necessarily, and the gustatory probably, involved, I am not aware that either paralysis or irritation of either of these nerves has been known to produce such a result.

The nervousness and peevishness of the little sufferer, who cried whenever I came near her, rendered it impossible to test the smell or taste, or even the general sensation.

REMEDY FOR CHRONIC HOARSENESS.—An eminent physician of Philadelphia contributes the following: In chronic hoarseness arising from thickening of the vocal chords and adjacent membrane, the ammoniated tincture of guaiacum is often a very efficacious remedy. It may be appropriately mixed with equal parts of the syrup of senega, and a teaspoonful given two or three times a day.

Editorial.

Buying and Selling of Medical Degrees.

We are in receipt of a letter addressed to us as Dean of what was Toland Medical College, but which is now the "Medical Department of the State University." We give below the letter *verbatim ad literatim:*

"R. BEVERLY COLE, M. D., DEAN.

"*Dear Sir:* Having studied medicine and surgery for the past two years, and being compelled to give it up on account of sickness, should like to buy a diploma of your college, only wishing it for the degree, as I do not intend to practice medicine. Yours, etc.,

"M. HASS,

"102 West 34th Street, bet. Broadway and 7th Avenue,

"New York City."

We have, at times since the receipt of this letter, been disposed to consider it intended as a joke, and at other times we have thought it to be serious, but that some mistake had been made in its address. In either case, however, it is a gratuitous insult to the State of California and her medical institutions, to those engaged in teaching, and the profession at large.

We would have Mr. Hass, and the rest of the world, distinctly understand, that diplomas conferring the degree of "Doctor of Medicine," have never been sold for money by either the Toland Medical College or the Medical Department of the University of California, nor is it likely that they ever will be so sold.

It is a fact already published, that to obtain a degree from the latter institution, into which the first-named has been merged, it is not only necessary that every qualification required by the best and most honorable colleges of America shall be possessed by the applicant, and evidence of the same be furnished satisfactorily to the Board of Examiners, which latter include the Medical Faculty, and such of the "College of Lettres," and of the "Board of Regents," as have received a medical education, but also,

that the Board of Examiners have determined to use their every effort in the direction of elevating the standard of requirement and acquirement, and thus make the diploma of the University not a mere certificate authorizing or licensing its holder to go forth and practice medicine, but that it shall mean something more, viz.: that its holder has been thoroughly educated in the science of his profession, and is qualified through actual acquirement to assume the responsibilities of his profession, and that the Board who sign the same, by that act assure the world of the facts set forth in the instrument. In one word, they are determined that the diploma of the institution over which they preside, shall be honored and respected of men, and that it shall have a *status* abroad as well as at home.

The University being under the auspices of the State, is in the best possible position to assume this attitude, and maintain it at any cost; andsuch is its intention.

If Mr. Hass had been endowed with the smallest degree of common sense, he would have informed himself as to the character of the institutions and people of California, before taking this step, which has resulted in mortification and disgrace to himself, and ought to send him to the State Penitentiary.

Does he suppose, that because we are separated from New York, where he resides, by a broad continent, that we are without civilization and honor? Does he not know that California boasts, and is justly proud, of her escutcheon, and that any attempt, come from whatever source it may, to tarnish her fame, will be repelled, and hurled back upon its author with the force of a thunder-bolt? Should he plead ignorance, then he is to be pitied; yet in the plea we have evidence that he never ought to be admitted to practice a liberal and learned profession. If his application springs from effrontery or design, then shame upon him, that he should desire to *creep* into an honored profession, by undermining its walls as a felon escapes from jail.

Had this ambitious individualbeen more successful in his aim, by applying to the "American University" of Philadelphia, whose charter we believe has recently very justly

been cancelled in Pennsylvania, he would yet have felt in the profession as though he was out of place, and very much as did Piso, who was told by Cicero, "that he had crept into honors through the reputation of the smoky busts of his ancestors, like whom he was, only in color."

If this man "Hass" has any sensibilities, it is to be hoped that the castigation which we have given him will be healthful in its influences, and that he may be induced in future to seek honors in an honorable way—through that *labor* which is indispensable to acquirement in any and all sciences. "*Absque sudore et labore nullum opus perfectum est.*"—HORACE.

Health.

Under this caption we notice a leader in the *Bee*, of Sacramento, February 4th, 1874. In the course of the article mention is made of United States Senator Sargent's bill, introduced by him on the 3d instant, "proposing to establish at Washington a Bureau of Health," the general design and duties of which shall be to acquire from the people of the United States their views on the subjects connected with the preservation of public health, and to assist, whenever called upon, the several States and Territories, in the establishment of hospital and quarantine systems. Should Mr. Sargent attempt nothing more while he occupies his present seat, than to carry this bill to a successful issue, he will have earned the respect and gratitude of the entire people, not only of this, but of the United States. From our standpoint, nothing could have been conceived that will contribute so largely to the well-being of the country, so far as health is concerned, as such a "Bureau," properly organized and equipped. Verily, we are beginning to believe that "out of evil good may come." The benefits to be derived from such a Board are incalculable, and to the true physician need not be enumerated. Such Bureaus exist in the older countries, and the results

have been astonishing. We are proud that the idea has emanated from California, and are disposed to give the credit to the State Board of Health or its intelligent Secretary, who has made the matter of public health his specialty for many years past, and is indefatigable in his exertions in that direction.

In this connection, we may be permitted to say that we regret to see a disposition on the part of certain members of the Legislature to carry retrenchment to the office of Secretary of the "State Board of Health," or at least to that extent as to cut off entirely the salary. We are in perfect sympathy with the general idea of retrenchment, and if the Secretary of this important Bureau is receiving more than his services are worth, it might be well to reduce the amount, but not cut it off entirely, as no man of culture and scientific attainment will or should be disposed to contribute his valuable time to the interests of a great common wealth, such as California, without some compensation.

The difficulty with our Legislature is, that on investigation of many institutions that are under the patronage of the State, they fail to perceive a *quid pro quo*, and never permit themselves to consider the fact, aye! patent fact to the professional observer, that we are yet a young State, and society being still in a state, measurably, of chaos, that it will require time, much time, to organize these institutions and Bureaus so as to make them perfectly operative; but should their creation be deferred for fifty years, the same difficulties would then be encountered. In every country under the sun, experience teaches that *time*, *persistence*, intelligence and industry have been indispensable to the final successful result.

When the Public School system was inaugurated, the number in attendance in proportion to the whole number of children was exceedingly small, and yet this was an idea that affected more immediately, so to speak, each and every tax-payer, than the matter of health *seems to*. So with every other step of progression—*time, time, time*, is indispensable. Now that Mr. Sargent has taken the

subject up in a manner that promises results at Washington, we hope no *serious* obstacle may be thrown in the path of our "State Board of Health," but that every aid and assistance may be extended to it, so as in every way to encourage our Senator in his efforts, and that we may be enabled, ere the close of this session of the National Council, to say, with pride, that this most important measure for the country, viz.: the creation of a "National Bureau of Health," was conceived in California, and through the instrumentality of *our* representatives was made a law and put in successful operation.

San Francisco County Medical Society.

In our July number, we took occasion to allude to the (to use a mild expression) want of delicacy in the managers of what purports to be the "County Medical Society," in transferring their place of meeting from Bush street to the building occupied by the "Medical School of Many *Aliases*," on Stockton street. Our remarks were, as expected by us, misconstrued. To use the language of the *Pacific Medical and Surgical Journal* for August, in its allusion to us: "Not having occupied the editorial seat long enough to *warm* it, topics were scarce and something had to be written."

We wish to inform all interested, that the editorial seat of the WESTERN LANCET is *now warm*, if it was not at the time of the penning of the article alluded to, and that we are still of the opinion that the removal of the Society's meeting place was injudicious and in exceeding bad taste.

We have no disposition to quarrel with the gentlemen who are active members of the association, yet it is patent to our mind that the removal was effected in the interest of the college or school whose premises are occupied, since no rent is charged, which fact bears on its face design and indirect cupidity, which is at once unjust and undignified in a society which professes to be a county organization.

A county society is presumed to be composed of representatives of the profession from any and every portion of the county in which it may be located, and not to be special or exclusive ; in fact, it should include every regular practitioner. But if, through the machinations of a few leading spirits, who being (as such always are) active members, the society is governed or directed in a manner that stultifies its members, we unhesitatingly pronounce it reprehensible.

We can readily understand that even the paltry amount of *twenty-five dollars per month*, when gratuitous quarters were offered, seemed enormous in the eyes of some of the members, and we also recognize that this fact may have been taken advantage of by the managers alluded to, and so commented upon and magnified as to induce the "Satellites of Jupiter" to acquiesce in the suggestion to remove to quarters offered "without money and without price."

From the standpoint of economy we can fully appreciate the argument that has and will be used, but we believe it to be specious and untenable, since, from the last year's financial showing, the association is not only solvent but in a good condition, and all this accomplished whilst it was under a monthly rental. Why, then, require its members to inconvenience themselves and possibly do violence to their feelings in attending its meetings at a medical school building which, if it has no other objection, is remote from the centre of the city, and tends to identify every member with the interests of said school or college, when no such interest is felt? Is it, as we suspect, that design and cupidity are at the bottom of the move?

It seems to us that fairness and decency would suggest the propriety of at once securing other quarters; or if this be not so in the estimation of the great planets of the Society, then we would suggest very earnestly that they re-incorporate under another name, dropping the misnomer of *County Medical Society* and substituting *Mutual Admiration Society*, or some other name that will express about the same idea, and incorporate in its Constitution an article which shall prohibit any one becoming a

member who is not an admirer of its leaders and a supporter of the medical "school of many *aliases*."

We may be accused of exhibiting too much feeling in this matter, but we submit that after attention had been called to the injustice of the move, if it was not clearly the duty of the Society to have corrected its error? With every wish for the success of the County Society when independently conducted, and complete sympathy with the sentiment expressed by the *Journal*, viz.: that the Faculty of the Medical College of the Pacific have endeavored "to promote the social and professional relations which are called into play by their assembling (with the Faculty of the University) on a common ground in the Society," he would respectfully ask to be permitted to meet them on independent ground.

Since the above was set up, in a conversation with one of the Executive Committee of the Society, we were made to understand that the *Committee* recommended the change and that the Society actually pays the *enormous* monthly rental of ten dollars for its present quarters, including *gas*, instead, as we had stated, receiving the accommodation "without price."

No one more than ourselves regrets that the Association should have taken so ill-advised a step; and we believe that if they will only *permit* themselves to view the facts from an impartial standpoint, they will perceive the injustice of the move, and in a proper spirit, at the earliest practicable moment, rectify the error.

We will simply suggest that it is a manly spirit that acknowledges an error and expresses a disposition to correct the same.

Low Standard of Literature in Journalism.

In an editorial article of a cotemporary, under the above caption, we are hauled over the coals, and in the true, old-fashioned style, so characteristic of its author, accused of using bad English in an article that appeared in the last

number of the LANCET, to all of which we plead guilty, and confess that the word "*have*" was used when we should have used *has*, and this is our crime.

We submit that such errors are of frequent occurrence in every journal and book under heaven, and we doubt not but that a very casual glance at the journal criticising us would prove it to be amenable in a larger degree and in the same direction; but with this we have nothing to do, as life is too short, and our time is too valuable to be passed in parsing every sentence of another's composition. Language is intended for the conveyance of ideas, and it would seem that ours was sufficiently plain and grammatical to be understood by our critic ; and here we are inclined to think is the rub. Our language is rather *too* plain and our ideas are too pointed to suit all men or be agreeable to all tastes.

However, we will not quarrel with our good old friend, and will in future endeavor to spare his "cheeks" from being caused to "tingle" by any display of "*grievous* ignorance." This we shall feel to be a duty, as no one can possibly foretell the effect of a second abstraction of blood from the body and a determination of it to the head of our friend, in such quantity as would be necessary to produce the faintest blush.

Death of Dr. Horace H. Wirtz, U. S. A.

Again we are called upon to announce that the inexorable hand of death has been stretched forth and laid upon one of our brethren. Dr. Wirtz, who died in this city on the 24th of last month, was more than an ordinary man and physician ; he had received a thorough education in the "Belles Lettres" department of the University of Pennsylvania, being one class (we believe) behind Gen. Geo. B. McClellan, for whom he had always the highest esteem.

On graduating he entered at once upon the study of medicine, and received his degree in the Medical Department of the same institution about 1845. In 1846, he was

appointed assistant-surgeon in the United States Army, and up to the time of his death, was considered by the medical corps of the service to be one of its most accomplished and profound members.

We have heard it often said when in search of information, whether in chemistry, microscopy or practice, "go to Wirtz, he is the encyclopædia of the coast," and many have been the times that we have followed the advice, and sought his counsel with profit.

Peculiarities of nature frequently stood in his way to advancement in rank, but no more learned or genial a gentleman has ever *graced* the medical corps of the Army, and in his demise, the Army, the profession, and the scientific world have sustained a loss which will long be felt and not soon if ever repaired. *Requiescat in pace.*

Letter From Dr. Garvin.

LOUISVILLE, KENTUCKY, January 14th, 1874.

DR. COLE—*Dear Sir:*—Having learned through the newspapers that San Francisco is now suffering from an epidemic of small-pox, and from recent experience, knowing the value of good "vaccine matter" at such times, I have taken the liberty of sending to you the enclosed vaccine crust, just removed from the arm of a healthy child. Hoping that it may assist in checking the terrible disease now existing in your city.

I am yours, etc.,

SAMUEL H. GARVIN, M. D.

It should always be gratifying to the profession, and the community at large, to know that California occupies a place in the memory and hearts of those who are more fortunate than ourselves. We take this method of thanking Dr. Garvin for his kind remembrance of us under the circumstances, that it may have the influence of exciting more of that spirit of benevolence amongst the members of our profession, than usually characterizes them.

We are, however, glad to be able to say that we have not had small-pox amongst us as an epidemic for upwards of a year past—yet the humanitarian spirit which actuated our friend is none the less appreciated.

The Siamese Twins.

Chang and Eng, with whom the world have been familiar for the past half century, died at their residence in North Carolina a few days since, and it is reported (with what truth, however, we cannot answer) that Professor Pancoast, and other eminent anatomists of Philadelphia, have repaired to North Carolina for the purpose of making an autopsy with reference, doubtless, to settling the question, which up to the present has always been one of speculation, as to the nature of the *bond* of union—the ligamentous connection which held them together.

It is to be regretted, from a humanitarian and scientific standpoint, that no physician of nerve was present at the death of Chang, as in that case, unquestionably, an effort would have been made to save Eng's life through the use of the knife.

We shall await the report of the gentlemen who are interesting themselves in the matter of making the post-mortem examination, and then give a full account of this most remarkable freak of nature, the "Siamese Twins."

Mortuary Reports.

For the convenience of such of our readers as feel an interest in the preservation of statistical tables, as to the number and causes of deaths occurring in San Francisco during the year, we publish this month a complete but condensed report for 1873, which has been kindly furnished us by our polite and accommodating Health Officer.

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during November, 1873.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	338	47	19	22	1	59	8	S. F. B'd of Health.
Sacramento	35	0	6	3	1	0	2	Sac. B'd of Health.
Petaluma	3	2	0	0	0	1	0	Dr. G. W. Graves.
Dixon	2	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	10	2	1	1	0	0	2	Stockton B'd Health.
Marysville	12	2	2	1	.	2	..	Dr. C. E. Stone.
Placerville	0	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego County	...	..	..	..	.	..	..	Dr. T. C. Stockton.
Oroville	0	0	0	0	0	0	0	Dr. J. M. Vance.
Oakland	...	..	..	..	.	..	..	Dr. T. H. Pinkerton.
Los Angeles	18	3	0	0	0	0	2	Dr. H. S. Orme.
Truckee	2	0	2	0	0	0	0	Dr. Wm. Curless.
St. Helena	0	0	0	0	0	0	0	Dr. J. S. Adams.
Napa City	4	1	0	0	0	0	0	Dr. M. B. Pond.
Watsonville	...	..	..	..	.	..	..	Dr. C. E. Cleveland.
Folsom	1	0	1	0	0	0	0	Dr. S. Lyons.
Santa Cruz	7	2	0	0	0	0	0	Dr. C. L. Anderson.
Suisun, Fairfield	...	..	..	..	.	..	..	Dr. S. D. Campbell.
Colusa	4	1	0	0	0	0	2	Dr. Luke Robinson.
Trinity County	5	0	0	0	0	0	0	Dr. J. C. Montague.
Santa Barbara	...	..	..	..	.	..	..	Dr. C. B. Bates.
Redwood City	2	0	0	1	0	0	1	Dr. Kirkpatrick.
San Andreas	3	0	0	0	0	0	0	Dr. C. B. Robertson.
Auburn	1	0	0	0	0	0	0	Dr. A. S. Dubois.
Tulare County	...	..	..	..	.	..	..	Dr. M. Baker.
Siskiyou County	...	..	..	..	.	..	..	Dr. T. T. Cabanis.
Placer County	9	1	1	0	0	0	1	County Recorder.

Remarks—Although our table shows a large proportion of deaths from Scarlatina in San Francisco, we are still happy to be able to state that, at the present writing (January 25th), the disease appears to have lost its epidemic character, and is now rapidly subsiding. Owing, doubtless, to the precautionary measures that have been

generally adopted, in view of its communicability, the prevalence of Scarlatina outside of the metropolis, has been much less than was anticipated in our last month's remarks, and, as may be observed above, only one death has been caused by it among all our rural towns. That the advice given in our previous remarks respecting the temporary suspension of the schools was predicated on sound principles, has been proved by the facts of the case. The deaths in December amounted to eighty-one, but with the advent of the holidays, and the general dispersion of the school-children, the disease began immediately to decline, and with due circumspection exercised in restricting convalescents from attending school too soon, it will now doubtless die out. Our statistics thus far go to show that the special subjects of Scarlatina are found mostly among children of the school-going age. Thirty-eight of the fifty-nine decedents in November, and fifty-six of the eighty-one in December, were between the ages of two and ten. The slight liability observed in the history of the disease everywhere, previously to the second year of age, and subsequently to the tenth year, is confirmed by our present experience.

THOS. M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

The Odor of the Breath in Diabetes Mellitus.

M. Gueneau de Mussy, in the *Gazette Hebdom.*, July 19th, says that for several years he has noticed that patients affected with diabetes have a sour breath that smells somewhat like alcohol, or like the heavy breath of the habitual drunkard. In many cases he was able to diagnose the disease from this odor of the breath, and he also noticed that with the decrease in the amount of sugar in the urine the odor disappeared from the breath.

SPIRITUALISM is a comet with a small body of natural fact and an enormous tail of guessing, of sensation, of superstitious and ignorant fear, and of conscious and interested imposture.—*John Hall, D. D.*

Monthly Report of Deaths Registered in San Francisco during December, 1873.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Countries.
1—Small Pox	11	....	1	4	6	..	..	11	..	2	3	4	
Measles	1	....	..	..	1	..	..	..	1	..	..	..	
Scarlatina	81	....	56	24	1	..	..	35	46	73	4	..	
Diphtheria	5	....	5	..	..	..	..	3	2	5	..	..	
Croup	2	....	2	..	..	..	..	1	1	2	..	..	
Whooping Cough	4	....	3	1	..	..	..	1	3	4	..	..	
Typhus and Typhoid Fevers	7	....	1	3	2	1	..	3	4	3	1	..	
Diarrhœa and Dysentery	3	....	3	..	..	..	..	2	1	3	..	..	
Cholera Infantum	5	....	5	..	..	..	..	4	1	5	..	..	
Cholera Morbus	..	....	..	..	..	..	..	..	..	..	..	..	
Pyemia	..	....	..	..	..	..	..	..	..	..	..	..	
Cerebro-Spinal Meningitis	3	....	2	1	..	..	..	1	2	3	..	..	
Syphilis	2	....	1	..	1	..	..	2	..	1	..	..	
Alcoholism	4	....	..	..	2	2	..	3	1	..	1	..	
2—Cancer	11	....	..	..	7	4	..	6	5	..	5	..	
Phthisis Pulmonalis	59	....	1	2	52	4	..	41	18	1	16	8	3
Hydrocephalus & Tubercular Meningitis	1	....	1	..	..	..	..	1	..	1	..	..	
3—Encephalitis	8	....	4	2	1	1	..	1	7	6	1	..	
Apoplexy	4	....	1	..	2	1	..	3	1	1	1	..	
Convulsions	17	....	17	..	..	..	..	8	9	17	..	..	
Other Diseases of the Nervous System	12	....	2	..	7	3	..	11	1	2	1	..	
Aneurism	2	....	..	..	2	..	..	2	..	..	1	..	
Diseases of the Heart	11	....	..	..	6	5	..	9	2	..	4	..	
Pneumonia	20	....	6	1	8	5	..	15	5	6	6	..	
Bronchitis	6	....	2	..	1	2	1	4	2	2	2	..	
Other Diseases of the Respiratory Organs	20	....	3	2	10	5	..	15	5	4	7	.	
Diseases of the Stomach and Bowels	14	....	3	..	6	3	2	8	6	2	4	..	
Diseases of the Liver	8	....	1	..	3	4	..	4	4	1	..	..	
Bright's Disease and Nephritis	6	....	1	1	1	3	..	5	1	1	4	..	
4—Puerperal Diseases	6	....	..	..	6	..	..	..	6	1	1	..	
Atrophy and Inanition	16	....	16	..	..	..	..	10	6	15	..	..	
5—Suicides	5	....	..	..	4	1	..	5	..	..	2	..	
Deaths in Institutions	90	....	17	3	47	21	2	17	18	18	19	1	5
Still-Births	..	....	..	..	..	..	..	10	9	..	..	..	.
1—Zymotic Diseases	133	31.37	80	36	14	3	..	69	64	105	9	4	1
2—Constitutional Diseases	75	17.69	5	3	59	8	..	49	26	5	22	8	4
3—Local Diseases	143	33.73	45	6	55	33	4	96	47	47	35	..	6
4—Developmental Diseases	35	8.25	22	1	8	3	1	19	16	23	4	..	
5—Deaths from Violence	15	3.54	1	..	12	2	..	15	..	1	4	2	
Deaths from Unknown Causes — Chinese	21	4.95	2	..	15	4	..	16	5	2	..	19	.
Deaths from Unknown Causes — Others	2	.47	1	..	1	..	..	1	1	1	1	..	.
Total	424	.....	156	46	164	53	5	265	159	184	75	33	13
Per Cent. to Total Mortality	..	100.00	36.79	10.85	38.68	12.50	1.18	62.50	37.50	43.39	17.69	7.78	30.

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Yearly Report of Deaths Registered in San Francisco during the Year 1873.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years	From 5 to 20 Years.	From 20 to 50 Years	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	36	.90	2	9	21	3	1	31	5	6	8	16	6
Measles	60	1.50	54	4	2	...	..	28	32	53	3	..	4
Scarlatina	261	6.52	179	79	3	...	..	116	145	236	15	..	10
Diphtheria	39	.98	30	7	2	...	..	23	16	37	1	..	1
Croup	30	.75	23	7	...	...	..	12	18	26	3	..	1
Whooping Cough	70	1.74	68	2	...	...	..	25	45	68	2	..	...
Typhus and Typhoid Fevers	98	2.45	10	30	49	9	..	57	41	31	18	..	49
Diarrhœa and Dysentery	55	1.38	37	..	14	3	1	33	22	37	2	1	15
Cholera Infantum	77	1.93	77	..	...	...	..	42	35	76	1	..	...
Cholera Morbus	7	.18	2	1	2	2	..	4	3	2	1	..	4
Pyemia	20	.50	..	2	12	6	..	15	5	2	6	1	11
Cerebro-Spinal Meningitis	41	1.02	25	9	5	2	..	26	15	32	3	..	6
Syphilis	16	.40	2	..	12	2	..	9	7	3	3	3	7
Alcoholism	38	.95	...	..	28	8	2	25	13	...	6	..	32
2—Cancer	66	1.65	...	..	40	23	3	40	26	...	19	1	46
Phthisis Pulmonalis	543	13.57	20	40	419	60	4	359	184	40	158	72	273
Hydrocephalus & Tubercular Meningitis	52	1.30	46	4	2	...	..	29	23	49	1	..	2
3—Encephalitis	142	3.55	84	27	27	4	..	67	75	107	12	1	22
Apoplexy	67	1.68	2	1	37	22	5	51	16	4	14	..	49
Convulsions	121	3.02	116	4	...	1	..	64	57	116	3	..	2
Other Diseases of the Nervous System	162	4.05	43	13	65	37	4	113	49	53	30	3	76
Aneurism	40	1.00	...	1	29	10	..	39	1	...	9	..	31
Diseases of the Heart	169	4.22	5	13	96	47	8	119	50	11	53	1	104
Pneumonia	226	5.65	96	11	80	35	4	144	82	103	35	2	86
Bronchitis	47	1.18	21	5	9	8	4	29	18	24	8	..	15
Other Diseases of the Respiratory Organs	121	3.02	38	8	49	20	6	91	30	42	23	2	54
Diseases of the Stomach and Bowels	132	3.30	61	12	45	8	5	76	56	67	16	..	49
Diseases of the Liver	57	1.43	6	1	32	17	1	42	15	7	7	2	41
Bright's Disease and Nephritis	45	1.12	3	2	27	11	2	33	12	4	16	..	25
4—Puerperal Diseases	51	1.27	...	4	46	1	..	...	51	1	13	..	37
Atrophy, Inanition and Old Age	299	7.47	218	8	14	28	31	145	154	220	21	6	52
5—Suicides	48	1.20	...	1	40	5	2	45	3	...	11	1	36
Deaths in Institutions	702	17.54	93	24	440	127	18	546	156	101	131	19	451
Still-Births	....	.....	...	..	...	...	..	155	116	...	...	...	...
1—Zymotic Diseases	908	22.69	529	157	169	45	8	482	426	635	82	23	168
2—Constitutional Diseases	699	17.47	81	50	476	85	7	450	249	104	187	74	334
3—Local Diseases	1441	36.01	492	103	560	243	43	938	503	558	247	20	616
4—Developmental Diseases	430	10.74	298	12	60	29	31	193	237	300	34	8	88
5—Deaths from Violence	168	4.20	15	9	110	21	13	149	19	20	34	14	100
Deaths from Unknown Causes: Chinese	307	7.67	20	15	240	30	2	272	35	18	...	289	...
Deaths from Unknown Causes: Others	49	1.22	25	3	10	9	2	30	19	27	8	...	14
Total	4002	.....	1460	349	1625	462	106	2514	1488	1662	592	428	1320
Per Cent. to Total Mortality	....	100.00	36.49	8.72	40.60	11.54	2.64	62.81	37.19	41.54	14.79	10.69	32.98

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Book Reviews.

A Hand Book of the Theory and Practice of Medicine. By Frederick T. Roberts, M.D., B.Sc., M.R.C.P., Fellow of University College, Assistant Physician and Assistant Teacher of Clinical Medicine at University College Hospital, Assistant Physician to Brompton Consumptive Hospital, etc., etc. Philadelphia: Lindsay & Blakiston; San Francisco: A. Roman & Co.

The work of Dr. Roberts is a comprehensive resumé of what is known and has been written of the subjects treated, but as a hand-book it is altogether too voluminous, and the detail of arrangement or refinement of classification is decidedly (in our judgment) adverse to its ever becoming a popular or useful book in the hands of the student or tyro in medicine.

Without wishing, or indeed there being any reason to detract from the merits of the work, we have expressed our opinion, and at the same time take pleasure in saying that, had it been designed for the practitioner as a book of reference, or the teacher at the bedside to guide him in the method of treating his subject before his class, we should consider the labor of our author well directed and its fruits such as are wholesome and consequently valuable to all who are engaged in the digestion of that profound and systematic course of study which belongs more properly to the teacher and practitioner, than to the student in medicine.

We have never been called upon to notice a book which presents a more acceptable appearance as to typography and paper, it being a gem in these directions, but the size of the work (being upwards of 1,000 pages) is too great to be bound in one volume, unless it be in the strongest leather.

A Treatise on the Diseases of the Eye. By J. Soelberg Wells, F.R.C.S., Doctor of Medicine of the University of Edinburg, Professor of Ophthalmology in King's College, London, etc., etc., etc. Second American

edition from third English edition, with additions, etc., etc. Together with selections from the Test-Types of Prof. E. Jæger and Dr. H. Snellen. Philadelphia: Henry C. Lea; San Francisco: A. L. Bancroft & Co.

It would be superfluous to say much of the work before us. The reputation which it has attained is too well known by all who devote any attention to the treatment of diseases of the eye, to render it more than necessary to announce, that this is the second American from the third English edition, and that, in some particulars, it is an improvement upon the former edition.

The cuts of illustration are excellently executed, and the addition by Dr. J. Minis Hays of the Test-Types of Prof. E. Jæger and Dr. H. Snellen make the book decidedly the most complete and valuable of any similar treatise in the English language.

SECOND BIENNIAL REPORT OF THE STATE BOARD OF HEALTH OF CALIFORNIA. For the years 1871, 1872 and 1873.

This report has been furnished us through the politeness of the "Permanent Secretary" of the Board, Prof. Thos. M. Logan, and we are pleased to be able to bear testimony to its completeness of arrangement and vast amount of useful information presented. The diagrams, tables and text are pregnant with important facts, which, from a scientific point of view, render the volume invaluable for future reference; and we hope the appropriation of funds by the State Legislature for such purposes may be sufficient to enable the Board to send to every physician on the coast a copy, which little attention alone will, we believe, stimulate such as may have been lazy or indifferent to such matters heretofore, to contribute the result of their observations in the form of regular reports monthly to the Bureau, that the original idea of its creation may be yet more successfully carried out.

In addition to the above, we have received two other publications, which, for want of space, we will acknowledge in the next number.

DR. H. B. TOLAND'S
Case of Skin Grafting.
Page 111.

J. WINGERO, Photographer,
650 Washington street.

THE

[illegible]RN LANCET:

[illegible] SURGICAL SCIENCE.

[illegible]

[illegible] OF CLINICAL SURGERY,
[illegible] OF CALIFORNIA.

[illegible] small portions of the
[illegible] and secured in
[illegible] seldom lives, and
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[illegible] case is the best
[illegible] opinion expressed.
[illegible] I will give in the language of the

[illegible] bruise of the skin,
[illegible] which was so slight
[illegible] little [illegible] at the time. A small
[illegible] and remain[illegible] three months, and
[illegible] detached. The ulcer from that time spread rapidly, and in June, 1871, I applied to a physician without being cured. On the 29th of July, 1871, I was

J. Wingero, Photographer,
650 Washington street.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR MARCH, 1874.

Surgery.

Skin Grafting.

BY H. H. TOLAND, M. D., PROFESSOR OF CLINICAL SURGERY, MEDICAL DEPARTMENT UNIVERSITY OF CALIFORNIA.

I have found by experience that small portions of the true skin, with the epidermis, when placed and secured in contact with an ulcerated surface, very seldom lives, and consequently does not fulfil the indication for which the operation was performed. The following case is the best evidence I can present of the truth of the opinion expressed. The history of the case I will give in the language of the patient:

In March, 1871, I received a slight bruise of the skin, about four inches above the ankle-joint, which was so slight that it attracted but little attention at the time. A small scab formed on it and remained about three months, and was then accidentally detached. The ulcer from that time spread rapidly, and in June, 1871, I applied to a physician without being cured. On the 29th of July, 1871, I was

admitted into the United States Marine Hospital. The doctor pronounced it a varicose ulcer, and applied acids freely, which caused the ulcer to spread rapidly in every direction. The resident physician then engrafted twenty-seven pieces of the skin, the marks of which still remain. This operation having failed, in a few weeks twenty more grafts were applied, some of which seemed at first to take, and then they disappeared. The doctor, after treating the case twelve months, during which time the ulcer increased slowly, said that I could not be cured. About that time the physician was changed, and a preparation of zinc was applied until all the soft parts were destroyed and the bone exposed. Then chlorate per manganate of pot., carbolic acid, and all the antiseptics were employed without the slightest relief being afforded. Having been treated about two years, and a proposition being made by the surgeon of the Hospital to amputate the leg as the last alternative, I concluded to leave, and being destitute, I was admitted into Dr. Toland's ward in the County Hospital.

The following treatment was then adopted :

His general health was then impaired. The ulcer had extended nearly to the knee and was very painful. I directed an antisyphilitic mixture ; applied simple cerate and a bandage. The progress of the ulcer was soon arrested, and so soon as I believed that the constitutional derangement was controlled, I applied three pieces of the true skin half an inch square. They all adhered, and in three or four weeks the entire ulcer was cicatrized. He left the Hospital, and after a few weeks returned with an ulceration of the leg about half the size of the one from which he had suffered so long. The operation was then repeated. The ulcer healed in three or four weeks, and he is well now, which may be seen by his photograph, which was taken three or four days ago. Since the ulcer healed the second time, the cicatrix has been supported by cotton, secured by a roller bandage, which should be continued until the part becomes sufficiently firm to resist the pressure of the blood produced by any position of the limbs.

There are now two men in this State, who had suffered from ulceration of the leg for twenty-five years, and have both been permanently cured. One is residing in the Tules, near Stockton, and the other in Calaveras County. From the result of *my experience*, I am satisfied that a limb should never be amputated for an ulceration of the soft parts, where neither disease of the bones or joints exists, and very seldom even when the former are extensively diseased. The cases of twenty-five years' standing were both permanently cured by general treatment, combined with simple cerate and a bandage.

Interesting Case of Wound of the Hand.

BY W. P. RANDALL, POINT SAN QUENTIN, CAL.

On October 27th, 1873, Isaac Pearlman, aged 29 years, was at work in the Cabinet Manufactory carried on by N. P. Cole & Co., in this prison, and by some unexpected movemen or jostle of the machinery, the back of his right hand, while closed upon a piece of his work, came in contact with a band saw, which was rotating at a very high velocity, and quicker than thought, the metacarpal bones were separated, and all his fingers hung, dangling loosely, in the palm of his hand. In this condition he came into the Prison Hospital.

I immersed the wounded hand in cold water, and kept it there until I hastily prepared to explore the extent of the injury sustained. Upon examination, I found that the saw had carried away the articulating surfaces of the four metacarpal bones and the corresponding surfaces of the first phalanges of the fingers, leaving in its track an exceedingly shattered and fragmentary appearance of the ends of all the bones involved, and every integument and tissue that came in contact with the saw was lacerated into shreds and densely intermixed with small comminuted particles of

bone, and an interosseous artery between the metacarpal bones which had been attached to the index and middle finger, was bleeding to the full capacity of its calibre. With this exception, the continuity of the vascular arrangement of the palmar arches supplying the fingers was not, to any great extent, interrupted, which in a large measure tended to determine my diagnosis and prognosis of the case.

I first applied Ferri persulphatis, in powder, to the bleeding artery, with a firm pressure, for a few minutes, which had the effect to control, almost entirely, the hemorrhage. I then, with tenaculum, forceps and scissors, gave myself to the task of extracting the fragments of bone found throughout the wound, which required considerable time of close inspection and patient labor. Coagula having become adhered to the exposed surface of the wound, I prepared a mixture of glycerine and water, equal parts, and carbolic acid, in the proportion of one part to ten of the menstruum, viz. :

℞ Aqua ;
Glycerine aa, ʒv ;
Carbolic acid, ʒj.—M.,

Which I poured freely into the wound, dissolving and removing as much of the coagulum as practicable ; then, with the bone forceps as good a face was made to the opposing ends of the metacarpal and phalangeal bones as possible. The fingers were then consecutively placed in position, beginning with the index finger, a stitch was taken for each finger, then a strap from the end of each finger to the wrist, bringing the edges of the wound in apposition, using continuously the above carbolic acid mixture, with which, also, a piece of lint, two thicknesses, was saturated and placed over the wound.

The forearm was flexed and placed upon a board (improvised), with a cushion under the hand and arm to keep them comfortable and the fingers (semi-flexed) in proper position, fastening the arm and board together by a few moderately tight turns of the roller, and a strap around the

neck for support. I directed pill of opium, two grains, at bedtime, and keep the wound constantly moist with the carbolic acid mixture.

October 28th, 8 o'clock A. M.—Found patient suffering pain on the palmar surface of the hand and fingers to a degree that suggested the approach of tetanus; I prescribed chloral hydrate grs. xxx, which gave relief in half an hour; back of hand much tumefied; pulse 90; mouth dry; tongue coated with a whitish, clammy secretion, with some thirst; prescribed enema of sulph. magn., which moved the bowels copiously almost immediately, and at 12 o'clock opium grs. iij; after taking the anodyne, he ate some toast, with tea, and soon went to sleep; directed following mixture of carbolic acid, with which to keep the hand constantly wet:

℞ Aqua fluv.;
Glycerine aa, ℥i;
Carbolic acid, ʒi.—M.,

And sulph. morph. grss. to be taken at bedtime.

October 29th, 7 o'clock A. M.—Patient rested some better; pulse 80; some thirst; hand much swollen, but not so much pain as on yesterday morning; took tea and toast for breakfast; costive; prescribed saline enema, which acted promptly, and morph. sulph. grss. at 12 o'clock and at 5 and at 10 P. M., and continue topical application.

October 30th, 7 o'clock A. M.—Patient had slept better than either of the preceding nights since the accident occurred; says he is hungry; hand not quite so much swollen; pulse 80; directed pulv. seidlitz every three hours until bowels are moved and morph. sulph. grss. at bedtime.

October 31st, 7 o'clock A. M.—Patient passed a moderately comfortable night; swelling of hand subsiding some; wound looks well; bowels not moved; has some appetite; directed enema of infus. senna and ol. ricini, and continue same applications to hand and anodyne at bedtime.

November 1st, 7 o'clock A. M.—Symptoms of patient all somewhat improved; removed old and bloody bandages,

etc., and applied new dressings; wound healthy, but the backs of the fingers very numb; directed treatment to be continued.

November 2d, 7 o'clock A. M.—Symptoms all improved; continue treatment.

November 5th—Hand much less swollen and wound granulating healthily, with suppuration very slight; continue carbolic acid in reduced strength (1 to 60) of menstruum.

November 20th—Patient's general health good; wound healed, with not a very unseemly cicatrix; fingers stiff and a little fullness on the back of the hand; circulation and sensation becoming gradually re-established.

November 25th—Patient discharged, with instructions to continue the support of the hand and protect it from cold.

Much might be said in favor of carbolic acid as a dressing in surgical cases, both recent and chronic. It corrects the fœtor of the secretions of ill-conditioned ulcers to a very great extent, and prevents decomposition and maintains a healthy condition of the tissues most involved in recent wounds, either incised or lacerated, and greatly facilitates the reproductive functions of the system. I prefer glycerine as a vehicle, because it remains moist longer than any other equally good application that we can so conveniently obtain.

Tinea Sycosis.

BY GEORGE G. WOOD, M. D.

Tinea sycosis, or what is popularly called "barber's itch," when met with in its true form, is usually very hard to cure. I have thought proper to submit to the profession, through the medium of your journal, the two following cases, which occurred in my own practice:

Case 1.—G. D., a farmer, aged 26 years, came to me suffering from "barber's itch," contracted about one month previously in a barber shop. He complained of an itching,

burning sensation on the chin. His chin was covered with small pustules, which, on being opened, discharged a thick, tenacious matter that dried into crusts. The pustules I found, on close examination, to be the inflamed hair-follicles, and on plucking out the hairs, they presented a frayed appearance at the roots, like the strands of a string, which is unmistakable evidence of a parasitic disease of the hair-follicles.

For treatment, I tried, in rotation, white precipitate ointment, weak solution of corrosive sublimate, citrine ointment, sulphite of soda, and, in fact, all the parasitic remedies at hand, but without avail. He came back each time complaining that the disease was growing worse. Looking through Niemeyer's Practice, I found his treatment of sycosis so peculiar that I determined, as a last resort, to try it in this case.

First I removed all the crust or scab, by softening it with glycerine; next had him shaved as close as possible. I then took my little sharp-pointed bistoury and opened every pustule that I could find. Where the pustules were confluent, I made cross incisions through the clusters. Like the shaving, this scarification was not nearly so painful as might be supposed. I next touched each opened pustule and cluster of pustules with a very strong solution of corrosive sublimate, made by dissolving one part of the sublimate in two parts of alcohol. During the night I had the part covered with a rag thickly smeared with white precipitate ointment. I repeated this process every day on the new pustules as they appeared. At the end of a week he was completely cured.

Case 2.—J. R., tailor, aged 45, came to me suffering from "sycosis" of six weeks' standing; symptoms the same as Case 1, with the exception of the disease being confined to upper lip. He had consulted other physicians without avail. Not feeling like subjecting him to the rigorous and somewhat painful treatment of Niemeyer, I tried the usual list of parasitic remedies, as stated in Case 1, but without the least favorable result; so at last I adopted Niemeyer's treatment, as in the other case. At the termination of one week, he was entirely rid of this loathsome disease.

It only remains for me to say that I am perfectly satisfied with this method of Professor Niemeyer's, as the surest and quickest that I know, and so I would recommend it for trial by other physicians. The disease destroys the beard so fast, that we need a quick means of curing it.—*Philadelphia Medical Times.*

Methods of Surgical Diagnosis.

The eminent Mr. Erichsen, in a recent lecture reported in the London *Medical Times and Gazette*, says:

There are three methods that you may employ. The first and simplest method—and happily in surgery we have very simple methods of diagnosis—is by finding one pathognomonic sign. By "pathognomonic" is meant a thing which of itself indicates the nature of a condition. For instance, a person complains of dimness of vision. You look into his eye, and you see an opacity of the lens. That of itself determines at once the nature of his disease, cataract. You need not ask him a single question or go a step further. Again, a person complains of trouble about the bladder. You introduce a sound, and you feel a calculus and hear it struck. Thus at once a single sign, and that sign a pathognomonic one, is determinative in itself and by itself not only of the existence of a malady, but of the very nature of that malady. You determine by that single sign, not only the existence, but the very nature of the malady that exists. Well, in surgery always seek for the pathognomonic sign, and endeavor to determine, if you possibly can, at once and by a single sign, what the patient's lesion may be.

Now the second method in surgery consists in getting what may be termed a "pathognomonic group" of signs; that is to say, a set of signs which singly and individually are not indicative of any one given disease or injury, but which, taken collectively as a group, indicate incontestably the nature of some given injury or disease. Take, for instance, the case to which I have already alluded, of an elderly person being tripped up upon the floor and being unable to rise. You look at the limb and find that it is somewhat shortened, that it is everted, that the patient is unable to raise it off the ground, that he complains of considerable pain, and that you feel crepitus about the region of the hip. Now any one of these signs, shortening of the limb, eversion of it, inability to move it, and crepitus, any one of these signs is common to a variety of different injuries and diseases of the lower extremity; but the group, taking them collectively, is indicative of only one single condition, and that condition is fracture of the neck of the femur. Hence, although the individual signs may be untrue in themselves, so far as the determination of any given injury is concerned, they are absolutely true, and incontestably so, when grouped together, in determining the

nature of a particular injury. That is the second method, then, of effecting a surgical diagnosis, by getting a pathognomonic group of signs or symptoms, for it will do for either.

The third method is a very important one, and it is the method that was greatly employed in the French school of surgery, and the employment of which undoubtedly led to the high position that it occupied, and does occupy, as a diagnostic school. It is what may be termed the negative method, or what is termed by French surgeons the "method by exclusion." By this method you first of all ascertain what a thing is not, and then by excluding everything that is not, you arrive at last at what it is. It seems a roundabout way of arriving at the truth, but in point of practice it is an exceedingly simple way. Let me give you an illustration. A patient comes to you with a tumor in the scrotum. You are in doubt as to what it is. You examine it first of all by transmitted light. You find that it is not translucent; therefore it is not a hydrocele. You examine the upper part; you find there is no impulse on coughing, and that the cord is not covered; therefore it is not a hernia. You find that the cord itself is not enlarged, is not tortuous, and vermiform in its feel; therefore it is not a varicocele. Having removed hydrocele, hernia and varicocele from any possible tumor of the scrotum, what have you left. Why, two conditions, hæmatocele and sarcocele. You find that it has not followed a blow, that it is not globular and uniform, that the scrotum is not discolored; therefore it is not a hæmatocele; *ergo*, it must be the last of these conditions, and that is a tumor of the testicle, a sarcocele. In that way, by determining what a thing is not, you speedily arrive at what it is; and this determination in the hand and in the mind of the practiced surgeon is so rapid as to be almost instantaneous. The whole process is going through in his mind with such rapidity that, as he lays his hand upon the part, he feels for everything, and he finds that four out of five conditions are absent, and his diagnosis is made instantaneously, although it is made by that process of negation or exclusion, and though the steps that lead to it are apparently complicated.—*Medical and Surgical Reporter*, Philadelphia.

BASE natures, if they find themselves once suspected, will never be true.—*Bacon.*

A SUCCESSFUL CASE OF ABDOMINAL SECTION FOR INTUSSUSCEPTION.—At a meeting of the Royal Medical and Chirurgical Society, in November, Mr. Jonathan Hutchinson narrated a case in which he had successfully opened the abdomen for the relief of intussusception. The patient was a child aged two years. The intusussception had commenced at the cæcum, and was of such length that its extremity, presenting the inverted ilio-cæcal valve, was extruded several inches at the child's anus. The condition had been one month in course of development; latterly the case had been treated as one of prolapsus, and attempts had been made to keep the bowel in place by means of a cork pad. The child was very ill, and the author having failed in attempts to effect reduction by enemata, etc., and having had experience of several similar cases which had ended fatally, determined to operate. The child was put under chloroform, and the abdomen was opened in the middle line, below the umbilicus. The intussusception was then easily found and as easily reduced. The after treatment consisted only in the administration of a few mild opiates, and the child made a rapid recovery.—*The Medical Record.*

DRY CUPPING INSTEAD OF TAXIS IN HERNIA.—I have abandoned the taxis in hernia. A large cup is applied to the abdominal wall; an assistant is directed to stand in between the legs of the patient and elevate the hips as high as possible, while I produce a large vacuum, by traction on the abdominal wall with my cup, and the weight of the bowel retained, together with the atmospheric pressure, cause the protruded portion to slip backward to its appropriate place very readily. I have not used the taxis for twenty-five years, as this plan is by far preferable. As an alterative in amenorrhœa, dysmenorrhœa and leucorrhœa, it cannot be surpassed. While practicing in Logan County, Kentucky, I cured a case of leucorrhœa by dry cupping and cool water injections, in the space of three months, which had defied the prescriptions of Dr. Boas Roberts and other physicians for eleven years.—DR. B. H. WASHINGTON in *Nashville Medical Journal.—Medical Examiner.*

GLYCERITE OF LIME FOR BURNS.—This is prepared from recently slaked lime, one part; glycerine, fifty parts; chlorinated hydrochloric ether, one part; and is said to soothe the pain and to diminish the inflammation.—*Southern Medical Record.*

INTENTIONAL FRACTURE OF THE FEMUR TO EQUALIZE THE LENGTH OF THE LEGS.—Professor Rizzoli, of Bologna, has treated, with entire success, four cases of shortened femur, by fracturing the bone of the sound limb and shortening it to the same length as the other. In one case, a girl, prior to the operation, scarcely touched the floor with the great toe of the shortened limb. The *New York Medical Record*, on mentioning the case, refers to a surgeon of New York, though without naming him, who not long since exsected a portion of the femur in a sound thigh, for the purpose of shortening it to an equal length with the other femur. This was prior to the European operation.—*Medical Examiner.*

EARTH AS A SURGICAL DRESSING.—Dr. Alex. Rattray (*London Lancet*) used this form of dressing on an obstinate ulcer of the matrix of the great-toe nail, which resisted every remedy, but soon healed under poultices of common earth. Under the same application, the cicatrization of ordinary ulcers, wounds, boils, etc., was equally favorable and rapid, as was the resolution of erythema of the skin. The dried and finely-sifted earth was used either in the form of poultice, or thinly spread ointment-wise on calico, or simply sprinkled over the sore.—*Southern Medical Record.*

Institutes and Practice of Medicine.

On the Nature and Essential Characters of Diseases.

Translated by A. P. HAYNE, M. D., San Francisco.

[We have thought, that it may not be uninteresting, to the majority of the readers of the WESTERN LANCET, to present from time to time, as a text for, and a variety to, the numerous *original* articles which fill the Medical Journals of the day; an occasional translation from the writings of recent and well-known authors of other countries; so as to create and foster, as it were, a community of sentiment, and an interchange of thought between the votaries of

science in distant lands; and in furtherance of this object, we venture to submit the following paper, for the perusal of those, who like ourselves, sometimes find leisure to profit by the teachings of fellow-workers in the cause of Medical Science.]

After examining successfully each of the principal subjects, which properly pertain to the domain of general pathology, we find ourselves under the necessity of saying something of that part, which may be termed the *hypothetical*, in contradistinction to those fundamental doctrines, which have been received and adopted at the present day. In doing so, we will not only more thoroughly understand the difficulties which encompass us, in traversing the labyrinth of disease, but by knowing our own weakness, be better prepared to arrive at the knowledge of what is true.

We will endeavor first to establish the meaning of the term *disease*, and then pass to the consideration of the *means* we possess of enlightening ourselves in the prosecution of this study.

It is a mistake to suppose that disease consists essentially and uniformly of an aggregation of symptoms which present themselves in life, or of a series of anatomical changes which are found after death. Take for instance Neuralgia. Here the scalpel reveals no appreciable lesson, and we are forced to conclude, that there must have existed in the affected nerve, some modification, of which pain is the effect. In the development of an inflammation, or of an organic degeneration (as in tubercle or cancer), an intimate change is established affecting the diseased parts, and this change, (obscure and often beyond the reach of human investigation) leads to secondary alterations of function or tissue, which terminates in an inflammation in one case, and in cancer or tubercle in another.

These latter changes fall under our immediate observation, and we designate them by their evident characters; but the *primary cause*, which precedes and produces them, escapes us, because the changes which occur in the minute parts of our organization, and the elements of our

structure, are inaccessible to our investigation. The anatomist, we are aware, is daily unfolding new facts, and by the finest injections and most delicate dissections, tracing vessels and nerves farther than they have ever been known before, until they have reached a point, beyond which the human eye can no longer penetrate. The microscope has taken up the task, and opened new fields and unfolded much valuable knowledge ;—and yet after all are we not still in ignorance of the structure, or the action of those minute net-works of vessels and nerves; and is not the manner of the formation of the bile, the urine, or the pancreatic juice still beyond our comprehension ?

If the subject then beset with difficulties in the living or healthy state, how much greater must those difficulties become, when we investigate the intimate modifications of disease, or attempt to trace those changes which lie hidden in the laboratory of nature. The history of medicine furnishes only too many proofs of the truth of what we assert.

This absolute ignorance of these intimate modifications holds true wherever we attempt to turn from *secondary* to *primary causes*. Thus for example, we know the conditions under which intermittent fevers show themselves ; but can we explain the mechanism of their productions, or the cause of the return of their access ?

Again, in any acute disease, we may perfectly understand each of the successive periods of attack, duration, and decline ; we may thoroughly appreciate the successive changes which each of these periods presents, and mark their symptons, but the *cause* which produced them, lies beyond the reach of our observation. Even when, by the aid of some remedial agent (as quinine), we are enabled to arrest the progress of a disease, we are at the same time, obliged to confess our ignorance, not only of the intimate nature of the disease itself, but even of the *modus operandi* of the means whereby we have triumphed. In a word then, life and death, health and disease, which in their sensible phenomena are fruitful topics for meditation and study, in their primitive causes, or intimate nature, are still incomprehensible mysteries.

From the earliest times, however, it has been the effort of medicine, to understand the intimate causes of disease. Some have attempted by an appearance of method, to trace a similitude, from things which are known, to those which are unknown. They have supposed, that by carefully observing the phenomena of disease, and by noting the organic alterations which accompany it, they may be able to trace the nature of that intermediate action between cause and effect, and seize upon the unknown modification, which precedes and characterizes the secondary phases of diseased action. There are others who have followed a more adventurous path, in these obscure researches. Instead of deducing their opinions from well authenticated facts, they have not hesitated to bend facts to their theories, upsetting the entire system of medicine for the attainment of their ends. This class inflict a double injury, for they not only disregard observation and experiment, but establish dangerous and erroneous methods of treatment. There are also those, who possessed of solid judgment, and profound sagacity, while giving themselves up to hazardous speculations, still preserve a proper appreciation of the value of their conjectures. It was of this class that Sydenham speaks, in alluding to his own opinions, where he says: "I have directed my best efforts to the elucidation of disease, being persuaded that he who establishes the proper mode of curing even the simplest one, deserves more praise than he who gains a reputation by brilliant theories, and subtle speculations, which are of no more real value to the science of medicine, than music is to an architect." It is not therefore to be wondered at, that many theories have been advanced, as to the intimate nature of disease. These may however be all reduced to two grand divisions—the one founded upon the doctrine, that the essential element of disease, is due to changes taking place in the fluids (humoralists), and the other in the solids (solidists). A brief glance at each of these, will facilitate us in our remarks. The "humoralists" have adopted a nomenclature conformable to their theory; thus in speaking of an

affection of the liver, or the circulatory or lymphatic systems, they say that the disease has its seat in the bile, the blood, or the lymph. Morbific causes, say they, act upon all the fluids; the aliment elaborated from the stomach, modifies the quality of the blood. Virus and poisons act in the same manner.

In their expositions of symptoms, their language is equally "humoral." The color and consistency of the blood, mucus, urine, and pus, especially attract attention. They scarcely mention other symptoms, or if they do, it is only under collective names. It is by the alterations in the fluids that they explain the succession of symptoms. They designate under these names "crudity," "coction," and "evacuation," the three principal periods of disease, and attribute its cause to what they call a "morbific material." In the first stage of disease, this matter endowed with a deleterious power, has not yet undergone any alteration, but exists in its "crudity;" in the second, the process of "coction" or development begins, and finally in the third, it is eleminated by, and found in the secretions, and equilibrium is thus restored, whenever it does take place. When any morbid evacuation is absent, they explain it by saying, that the morbific matter, after being eliminated, has been assimilated by the natural secretions, and thus has ceased to be injurious. They explain the metastasis of disease, by what they term the "changes of humoral principle," and attach great importance in diagnosis, to the inspection of the liquid evacuations, especially the urine. They maintain that the appearances after death, confirm their theory—as in the redness of inflamed tissues, they see only an accumulation of blood; in dropsies, a dissolution of this fluid; in tubercle, an effusion of lymph; and in organic alterations, nothing but some change in consistence or coagulability of the liquids. The therapeutical indications of this system are in harmony with their doctrines. Whether bleeding, purging, or diaphoresis is recommended, it is in view of some supposed effect, in changing the quantity or quality of the fluids; or of producing a determination to such or such an organ.

We pass now to speak of the "solidists." They regard disease in an entirely different aspect. According to their doctrines, the fluids occupy but a secondary or passive position in the phenomena of life and disease. Deprived of vital properties—sensibility and contractility, they are entirely subordinate to the action of the sensible and contractile organs which contain them. Disease, they say, exists essentially in the solids, which alone can receive the impressions of morbific causes, and alone furnish important symptoms. "Sympathy," which has its seat in the nervous system, is regarded by them as sufficient to explain the connection between symptoms, and the general disturbance which accompanies the affection of such or such a part. "Metastasis" and "crisis," are, according to their theory, a "transposition of action" or of "irritation," and not of fluids, which, say they, is more in accordance also, with nature. The several organs in a state of disease, are supposed to preserve or acquire among themselves relations, in virtue of which they transmit their impressions. Thus an irritation which has occupied any organ, may transmit itself to another, the first resuming its natural functions, and if the affection transmitted be trivial, health is re-established; but if grave, it constitutes a metastasis. As proofs of this, they cite the examples of neuralgic and rheumatic affections—where there is a transposition of pain or other nervous phenomena, but no exhalation of fluid. Finally in those cases, in which their is an afflux of fluids to any organ, say they, we observe the greatest variety in the quantities of these fluids. The only constant phenomena, is an irritation which precedes it, and which is characterized by pain, heat, redness and swelling. As to the diagnostic or prognostic value of symptoms revealed by the fluids, they consider them as only of secondary importance, and the results of autopsies, unfolding as they do, manifest changes in the solids, prove how little reliance is to be placed on the doctrines of humoral pathology. Lastly, the most positive indications owe their origin to changes taking place in the economy—in the digestive, respiratory,

or circulatory organs—presenting symptoms evidently due to the solids.

These constitute the chief points of difference between the respective theories of the "humoral" and "solidist" school. We have presented them side by side without comment. The absurdities of the earlier doctrines of the humoralists, who attributed everything to "fermentation" or "putrefaction" (doctrines advanced when chemistry was in its infancy), we pass over without comment. It was an easy task to demonstrate their folly and overthrow their system. The brilliant physiological researches of Bichat, and the zeal with which Pinel subsequently attacked the humoral doctrine of a later period, aided by the impulse given to the study of pathological anatomy, all tended to produce that revolution, which for a time overthrew the humoral and established the doctrines of the solidists, carrying the medical mind to the opposite extreme, and finally claiming that all the phenomena of life, in the healthy as well as diseased state, were due entirely to the immediate influence of the solids.

It was not until the commencement of the present century, that the importance of the fluids in the animal economy, began again to assert and assume their proper value. We were among the first to attempt to establish this; 1st. From the fact that the fluids constitute by far the larger proportion of the human organization; 2d. From the cadaveric revelations, found often in them alone; 3d. From the nature of these agents which disturb health, being shown through the processes of absorption and nutrition, and thus evidently modifying the composition of the fluids; and 4th. By certain modifications met with, in the fluids during life; as for example, those presented by the blood in scurvy and jaundice—the urine in diabetes—the bile in hepatic concretions, etc., etc.: showing that the doctrine of the solidists *alone*, was not sufficient to explain these phenomena, and that it must sooner or later abandon its exclusiveness of opinion, and acknowledge the relative claim of the doctrine it had overthrown. Since this time a corresponding

change has taken place in the medical world. The proof of a diminution of albumen in the blood, and its presence in the urine in Bright's disease; the modifications in the relative proportions of fibrin and globules observed in inflammatory and cholorotic affections—the presence in this liquid of pus, in certain diseases—the numerous changes observed in the milk, the urine and saliva, have all tended to establish the importance which the liquids must occupy in the study of disease. Hence at the present day, the best medical authorities are found occupying *middle ground*, as it were, always the safest and most free from error in the study of obscure topics. We will not follow the numerous changes which at different times have been adopted by one or the other of these schools, for elucidating the essential character of disease. They are at the present day either abandoned, or belong to the history of our Art. Here as in everything else, we can only ignore what has not been given us to understand. Once the human mind has launched into the domain of hypothesis and theory, it knows not where to stop. If in the foregoing remarks we have failed to reach the end desired, let it not be supposed that we have labored in vain, for in the study of any science, not based upon mathematical precision; he who points out the paths that lead to error, renders a service scarcely less than he who shows the way that leads to truth.

Clinical Lecture on the Medical Treatment of Gravel and Calculi.

BY JAMES TYSON, M. D.,
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[Concluded from last number.]

If, however, it is possible to divert some of the work of the kidney to another channel, and thus relieve an organ already overworked, it is much better, at least, to superadd and sometimes, perhaps, to substitute such treatment. This may be accomplished by acting upon the liver and

bowels—organs which in their combined action are quite as important excretors as the kidney. Few who have had experience in these cases have not seen the advantage of a mercurial purge at night, followed by a saline the following morning. The constant use of these means, however, would be impossible, for evident reasons, and others must be sought, in application of the same principle of complemental elimination. Such means are afforded in the natural *saline* purgative waters, for the general introduction of which we are also largely indebted to Sir Henry Thompson. These have for their chief ingredients sulphate of soda and sulphate of magnesia, and are represented by the Pullna, Friedrichshalle, Marienbad, Carlsbad and Franzenbad Springs in Germany. The Pullna waters contain about one hundred and fifty-four grains of sulphate of soda and one hundred and sixteen grains of sulphate of magnesia to the English pint; those of Friedrichshalle, fifty-eight grains and forty-nine grains, respectively; those of Marienbad, forty-eight grains of sulphate of soda, none of magnesia, nine grains of *carbonate* of soda, and a little iron. The Carlsbad contains twenty-five grains of sulphate of soda, no magnesia, and thirteen grains of carbonate of soda; the Franzenbad, thirty grains of sulphate of soda, no magnesia, six grains of carbonate of soda, and a little iron. In contrast with these, Vichy contains but three grains of sulphate of soda, no magnesia, forty-seven grains of carbonate soda, and a little iron, to the pint; and Vals, none of the former two, but sixty-five grains of carbonate of soda, with a little iron. The latter are, therefore, as already stated, simply strong solutions of carbonate of soda.

Of these waters, that to which Sir Henry Thompson gives the preference, and that upon which my own experience has been based, is the Friedrichshalle, the Pullna having been found to purge too freely and to produce griping. Of the Friedrichshalle about eight ounces or an ordinary tumblerful may be given every morning about an hour before breakfast. This is usually followed after breakfast by one or two full, copious stools, produced by about twenty-five grains of sulphate of soda and twenty of sulphate of magnesia—quantities which, if dispensed from the shops, or even by evaporating the proper amount of the natural water, would probably have no effect whatever, though the latter would still be more efficient than the salts as ordinarily obtained. Thus there will be seen to be some peculiar efficacy in the natural waters, the cause of which is not precisely known. This treatment should be kept up for

three weeks or a month, and after a short intermission be returned to. In continuing the treatment, there will be found this important advantage, that, instead of having to increase the quantity each day, it may be diminished, while the effect will still continue, so that, by a gradual reduction, at the end of three weeks four ounces will have as much effect as eight at the outset. It is occasionally of advantage to precede the treatment by a small dose of blue pill—three or four grains; this, if digestion be deranged, the appetite bad, and the tongue foul. Sir Henry Thompson also recommends the use of five ounces of hot water in connection with the eight or reduced amount of the Friedrichshalle; but I have found patients complain of discomfort evidently due to a distension of the stomach when this dose is administered. When it can be borne, additional effect may reasonably be expected from the dilution as well as the increased temperature, since in both these respects it is made to approach the character of the water at the spring, which is hot and less concentrated than that which is exported. The increase in temperature may also be obtained by placing the glass of water in a second vessel containing hot water.

You may wish to know precisely the plan of the eminent English surgeon. It is to administer the Friedrichshalle as above directed for one, two, or three weeks, according to the nature of the case and results, and then to combine with three or four ounces of it, five or six of the Carlsbad, which, you will recollect, contains twenty-five grains of the sulphate of soda and thirteen of the carbonate to the pint; it is therefore more alkaline. To this combination he adds three or four ounces of hot water. After giving this for two or three weeks, six, seven, or eight ounces of hot Carlsbad are given alone for another fortnight. This course may be repeated once in three or four months, if necessary, while in the meantime, as an occasional aperient and corrector of digestion, he knows nothing at all equal to Friedrichshalle, leaving the patient, as a rule, less constipated than he was before. With a very much less experience, of course, but having examined the subject with considerable care, and having lost no opportunity of testing the plan, it has seemed to me we can do much more for these cases than formerly.

Should the Friedrichshalle prove insufficient in some cases, the Pullna may be substituted as a more powerful water, containing, as it does, nearly two and one-half drachms of sulphate of soda, and nearly two drachms of sulphate of magnesia, to the pint.

These waters, including Pullna, Friedrichshalle, and Carlsbad, are now easily obtained in this country, being largely imported by a Philadelphia firm. I must say, however, that the various salts of these waters advertised for sale as the "Carlsbad salt," "Pullna salt," etc., are no substitute for the natural waters, having very little more virtue than the same quantity of salts obtained from other sources.

The expense of obtaining these waters in this country will doubtless be an obstacle to your ordering them for some patients. I have therefore taken some trouble to find out which of the numerous American spring waters correspond or approach them in composition. Most prominent among these I find the waters of Crab Orchard Springs, located at Crab Orchard, Lincoln County, Kentucky. These waters contain 7 grains of sulphate of soda, and 25.6 grains of sulphate of magnesia, to the pint. From these are derived by evaporation the celebrated Crab Orchard salts, whose superiority over the ordinary Epsom salts is well known. These contain 63.19 parts of sulphate of magnesia, 4.20 parts of sulphate of soda, with smaller quantities of sulphate of potash and lime, in 100. Besides being less irritating than Epsom salts, they possess the advantage claimed for Friedrichshalle of not requiring the daily quantity necessary for an effect (at first a drachm freely diluted) to be increased. The Estill Springs, located in Estill County, Kentucky, furnish thirty-three grains of sulphate of magnesia to the pint; but no sulphate of soda is named in the analysis of Dr. Robert Peter, which I find in "Walton's Treatise on the Mineral Springs of the United States and Canada."

The well-known Bedford Spring waters at Bedford, Pennsylvania, also belong to this class, though containing but ten grains of sulphate of magnesia to the pint. They are also chalybeate, and are said to resemble the Franzenbad waters of Bohemia, to which we have referred; but the latter contain thirty grains of sulphate of *soda* to the pint, while the Bedford contain but ten grains of sulphate of *magnesia*. The beautiful location of Bedford, in connection with the undoubted medicinal value of its water, renders it a very popular summer resort. I may add that "gravel" and "calculus" are among the ills for which Bedford water has long claimed efficiency. The numerous Saratoga springs contain almost none of these valuable ingredients, but pre-eminently chlorides and carbonates. Thus much of information, and something more, you should have of

American spring waters, in order that you may intelligently advise those who consult you with regard to them. It is not unlikely that the skepticism with which American physicians have hitherto regarded the medicinal effects of spring waters has been, in part at least, due to our ignorance of their actual qualities, and that we are, therefore, in a measure responsible for their having largely fallen into the hands of empirics. Much valuable information may be found in the volume above alluded to and one or two others recently issued from the American press.

There is one more point in connection with the preventive treatment of calculous diseases to which I must call your attention, and that is diet. I have already alluded to the effect of certain vegetables, as the rhubarb or pie-plant, tomato, and sorrel, in promptly producing crystalline deposits of oxalate of lime. By persons, therefore, inclined to oxalate of lime concretions, these should be avoided. There is also reason to believe that potable waters charged with the salts of lime increase the tendency to the formation of oxalate of lime calculi. To the same end, fatty matters, saccharine substances, and those containing sugar or readily converted into it, as sweet fruits, together with alcoholic drinks, should be omitted by those subject to uric acid deposits, the use of these matters increasing the work of the liver, and, with it, the vicarious action of the kidneys. While the use of a pure nitrogenous diet is, for the same reason, to be avoided, and the free use of vegetables, regarding the exceptions named, to be recommended, total abstinence from animal food is not necessary or desirable. Nor need tea and coffee be interdicted, these substances having been shown to diminish the formation of uric acid and increase that of urea, acting, therefore, like the citrates, acetates, and tartrates. Quinine, digitalis, atropine, and cod-liver oil are placed in the same category—diminishing the formation of uric acid and urea as well—and may be used in connection with the previous treatment as the patient's condition or special circumstances may require.—*Philadelphia Medical Times.*

BUTTER-MILK IN TYPHOID FEVER.—Dr. DeLisle has had great success in treating this fever with butter-milk, reducing the tympanitis, etc., and regards it as a prophylactic when taken largely when the disease is prevailing.

Action and Uses of Croton-Chloral Hydrate.

BY OSCAR LIEBREICH, M.D., PROFESSOR OF MATERIA MEDICA IN THE UNIVERSITY OF BERLIN.

I have the honor of directing attention to a new remedy, which serves to corroborate the theory I have propounded with respect to the action of hydrate of chloral.

When chlorine gas acts on aldehyde, croton-chloral is formed, as has been demonstrated by Dr. Kramer and Dr. Tinner. In order to avoid a mistake which is apt to be caused by the name, I must here remark that this body possesses no relation whatever to croton-oil, although its chemical constitution proves it to be the chlorated aldehyde of crotonic acid. Croton-chloral differs in its outward appearance from hydrate of chloral, differs widely from the latter with regard to its physiological effects. Four *grammes*, or a drachm, of this substance, dissolved in water, and introduced into the stomach, produce, in the course of fifteen or twenty minutes, a deep sleep, accompanied by anæsthesia of the head. Whilst the eyeball has lost its irritability, and the nervus trigeminus shows no reaction whatever on being irritated, the tone of the muscles remains unaltered.

I have experimented with this remedy on maniacs during an attack of mania. They remained quietly sitting on their chairs in a deep sleep, their pulse and respiration being unchanged for two whole hours together. If anæsthesis had reached so high a degree in consequence of the application of hydrate of chloral, the patients would have dropped from their chairs, and both their pulse and respiration would have been considerably retarded. I have seen croton-chloral acting in the same way on healthy individuals. In some cases of tic douloureux, the remarkable phenomenon is exhibited that pain ceases before sleep sets in. I am sorry to say, however, that this remedy acts only as a palliative in this dreadful disease. I nevertheless prefer its action to that of morphia, because it has effects as good as the latter remedy, without being so detrimental to the constitution in general. I have never observed any unfavorable effects of croton-chloral on the stomach or any other organ, although I have made frequent experiments with it.

The indications for the use of this remedy are to be found—1. In cases where hydrate of chloral is inapplicable

on account of heart-disease ; 2. In cases of neuralgia in the district of the nervus trigeminus; 3. In cases where very large doses of chloral are necessary to produce sleep. I there recommend the addition of croton-chloral to hydrate of chloral.—*British Medical Journal.*

Croton-Chloral Hydrate.

The following cases have been reported, which demonstrate the action of croton-chloral hydrate :

A. suffered from facial neuralgia of a most severe character. It affected her hearing and eyesight. She could not rest or take food. She took one grain of croton-chloral hydrate every hour. In three hours she was considerably better. After taking three more doses, she was entirely free from pain.

B. suffered much from facial neuralgia dependent on decayed teeth, and had not been able to take food or sleep for three days. She was ordered croton-chloral hydrate in grain-doses every hour, and obtained great relief after two doses. Six doses removed the pain completely. She slept that night.

C. This patient suffered from concussion of the spine caused by a railway accident some years ago. She had every variety of treatment for the pain she suffers in the spine and the nerves proceeding therefrom. She took potassium bromide gr. 20, and croton-chloral hydrate gr. 1, three times a day, with marked relief and no bad symptoms.

E. This is a young dyspeptic and neuralgic patient, and suffers greatly from dysmenorrhœa. She took two-grain doses when the paroxysms of pain came on, with marked relief.

F. has been under treatment for various neuralgiæ for some years. She has had, at one time or another, almost every external therapeutic agent in the *Pharmacopœia*—strychnia, iron, quinine, ammonium, chloride, aconite, belladonna, iodine, bromine, blisters, hypodermic injections, galvanism, together with baths and other hygienic appliances, including change of air. In this case, two-grain doses of croton-chloral hydrate every hour afforded more speedy relief from pain than any of the above remedies. After taking eight grains, she was almost free from pain.

In thirteen patients who have taken croton-chloral hydrate, not a single bad symptom has been observed. In grain-doses, it relieves pain quickly; causes natural sleep; no subsequent headache or furred tongue. In several cases, it acted as a gentle laxative.—DR. BAKER, in *British Medical Journal.—Canada Lancet.*

On the Treatment of Whooping-Cough by Chloral Hydrate and Bromide of Potassium.

BY DR. PIERRE ARMAND, PARIS.

The following is the result of the observation of the treatment of twenty-three cases in the Charity Hospital of Lyons, in the service of Dr. Chatin:

1. Whooping-cough is a spasmodic catarrhal affection, but the nervous symptoms are predominant when there is no complication. It is of specific nature, but has not a fixed and determined course. Art can interfere successfully in abridging its duration and rendering it more mild.

2. Bromide of potassium and hydrate of chloral have already been used with success by several therapeutists in whooping-cough. The results obtained have appeared superior to those given by most remedies.

3. The physiological properties of bromide of potassium and of hydrate of chloral permit a rational explanation of the mechanism of their action.

4. The observations which are reported confirm their efficacy in this disease, since we have almost always seen that under their influence the number and intensity of the fits of coughing are diminished, the vomitings cease, and that most frequently the duration of the disease appears shortened.

5. The bromide may be employed with advantage at the commencement of the convulsive period; the hydrate of chloral in the confirmed convulsive period.

6. The use of the bromide in moderate doses is not attended with any inconveniences.

7. The hydrate of chloral is almost always harmless. It should always be prudently given, especially in the commencement, in consequence of the intolerance to it observed in some subjects.

8. These two remedies, but especially the chloral, are contra-indicated in cases complicated with severe bronchitis or broncho-pneumonia.—*The Medical Record.*

Gynecology and Diseases of Children.

Discussion on the Use of the Intra-Uterine Stem in Uterine Diseases.

By C. H. ROUTH, M.D., and others, before Obstetrical Society of London

The author, after premising that the most opposite opinions were held by learned men of different schools as to the usefulness of intra-uterine stems at all, pointed out that this arose from sufficient precautions not being taken before they were used, and that it was not sufficiently clearly laid down in what special uterine diseases they should be employed, and thirdly, in the quality of the instrument to be selected. Where proper care was taken to meet these three contingencies, the use of intra-uterine stems was both safe and advantageous.

I. *Preliminary treatment.*—All inflammatory and congestive symptoms should be first combated: 1. Local blood-letting by leeching, scarification, or it may be by the hysterotome. In cases complicated with general induration, potassa fusa; in cases of fundal endometritis, in addition, blisters to the abdomen; in milder examples, glycerine stupes applied for a week or so to the cervix uteri, etc., besides ordinary diatetic means and occasional laxatives. 2. In some cases it was necessary, in addition, to enlarge the cervical canal by tents. The author showed that some of the accidents following the use of tents were due to the neglect of precautionary measures preceding their use. Also, to the tents not having been properly disinfected. Also, to straight tents being forced up into straight uteri, in which cases, flexed tents should be used. The author explained that some sponge tents were injurious in this way, and that from too much pressure in their preparation, their expansive power was much reduced. 3. The enlargement of the canal was sometimes best effected by the hysterotome, after which he introduced a small, disinfected, sea-tangle tent, covered with glycerinized and partly iodized cotton, into the outer part of the opening made, and kept it *in situ* by cotton plugs. This treatment was rarely followed by accidents. 4. His experience was entirely opposed to forcible and immediate dilatation by means of instruments.

II. The author next proceeded to state the diseases in which the intra-uterine stem should be employed: 1. In cases of membranous cervix. One unsuccessful case was

detailed as having led him to use the stem more heroically, and a second, successful, in which this was done, was given in confirmation. 2. In cases of amenorrhœa, not due to anemia, but to a stoppage from some other accidental cause, the presence of a tent in utero provoked a catamenial flow. The advantages of a simple self-retaining stem over the stem made of copper and zinc were dilated upon, and a case given to illustrate the opinion. 3. In cases of dysmenorrhœa. Two varieties of this form of disease were given. In the first, mechanical obstruction existed, and in the second the neuralgic element was most marked. Both had been cured by the elastic caoutchouc stem. 4. In cases of uterine flexion. A case of retro-flexion was given, which was cured by the elastic stem, within which a spiral coiled wire had been placed. The author recommended the use of internal stems, more particularly where Hodge pessaries had failed or could not be borne, where there was synchronously rectal disease, and where the flexions were very acute, with much fundal pain.

III. The author then laid down what practice indicated as necessary conditions in the formation of an intra-uterine stem: 1. They should allow an omni-lateral movement of the uterus. 2. They should not be longer than two inches, save in exceptional cases, in order that they may not touch the fundus uteri. 3. They should be bicornate superiorly, so as to be retained in utero. 4. Their diameters should not be too small. 5. They should be light and not easily corroded.

IV. He then proceeded to show that the instruments already used were capable of division into seven groups: 1. Those which fixed the uterus, like Dr. Simpson's original instrument. 2. Ordinary cylindrical stems, with a disc, and which had been made of almost every known substance. These were chiefly disadvantageous, inasmuch as they fell out, and prevented the resiliency of the uterus on itself. 3. Those with a vaginal support, either by a diaphragm or a Hodge. Like the last, they prevented the elasticity of the uterus on itself, but did not fall out. 4. Divaricating stems, as originally instituted by Graham Weir. These remained *in situ*, but they all prevented the elasticity of the uterus upon itself. 5. Coiled wire stems, which allowed for this uterine elasticity, but needed a support inferiorly. 6. Caoutchouc stems, as invented by Dr. Greenhalgh, and subsequently modified by others. 7. A modification of the fifth and sixth varieties combined, the caoutchouc stem having a thin coiled wire within. This

last he had first used and found very effective in some cases. Owing to the cornu superiorly, a vaginal support could be frequently dispensed with.

Dr. Aveling said perhaps an appropriate opening to the discussion would be to call attention to a fact not mentioned by the author of the paper, viz. : that intra-uterine stems were used in the seventeenth century. Henry van Roonhuyse, after dilating the cervix with gentian or sponge tents, introduced a tent of silver, ivory or horn; after the fashion of a screw, thicker at one end than the other, and hollow. These, he said, might be carried without inconvenience. This practice was adopted in England by James Cook, in 1647.

Dr. Barnes said he was convinced that intra-uterine stems were, in properly-selected cases, of the greatest use. He had frequently employed the galvanic pessary with satisfactory results in cases of amenorrhœa, the catamenial discharge appearing and the nervous symptoms passing away. In consequence of the zinc portion becoming rough, he advised the removal and cleansing of the instrument once a fortnight. In cases of dysmenorrhœa, he had, after incising the os externum, used Dr. Chambers' stem with advantage, pregnancy having frequently followed the removal of the dysmenorrheal condition.

Dr. Heywood Smith supported Dr. Routh in his method of reducing uterine congestion by depletion before dilating the cervix uteri. In dividing the cervix, he preferred the use of a nearly straight knife, and the introduction of sponge tents after incision he thought dangerous. He waited until the edges of the incision healed before introducing any tent.

Dr. Squires remarked that if all the treatment described be really required, merely with the object of introducing a stem, surely a prior question arises whether that operation should not be delayed until relief had been obtained by means less severe than those detailed in the paper.

Dr. T. Chambers said he had not found it necessary to adopt the prolonged preliminary treatment urged by Dr. Routh. He thought all dislocations should be reduced at once, and this method of treatment had, in his hands, proved most satisfactory. He thought it dangerous to introduce a stem in the consulting-room or out-door department of a hospital, and then allow the patient to go home. She should be kept in bed after its introduction at least a week.

Dr. Wynn Williams agreed with the last speaker, that rest for several days was necessary after the introduction

of the stem. Where much difficulty existed in introducing it, the stem should be made to assume the curve of the flexed uterus. He thought the precautionary measures proposed by the author should be carried out when any diseased condition existed.

Dr. Edis considered the employment of intra-uterine stems to be attended by much risk, not only to health, but also to life; and that, although he had occasionally employed them, he avoided their use whenever it was possible. They should be employed with extreme caution, and only after preparatory treatment.

Dr. Tilt, whilst admitting the value of stems, stated that he found it necessary to use them only in a limited number of cases. He was surprised that no speaker except Dr. Edis had taken into account the serious consequences that occasionally followed the use of stem pessaries. He believed they not unfrequently caused or augmented uterine or peri-uterine inflammation.

Dr. Routh said, in answer to Dr. Squire, that if preliminary treatment cured his cases, he never thought of applying a stem; and, in answer to Dr. Tilt, he begged to say that he did not use the stem in *every* case, but only in those in which the ordinary measures failed.—*Obstetrical Journal.*

Extract from Lecture

OF DR. EVORY KENNEDY, PRESIDENT,

Before Obstetrical Society of Dublin.

Cases sometimes present themselves, in which large and extensive uterine ulceration is present, with apparent phagedenic characters, with hardened base and intense pain, evincing most of the constitutional symptoms of carcinoma—wasting, anxiety, languor, and exhaustion on exertion; yet such cases are not necessarily malignant in their nature, and will heal under properly-directed treatment.

The most experienced practitioner may be deceived in such a case, and find his treatment result in recovery, in place of death, as he had anticipated. And yet there is usually a *je ne sais quoi* about these cases that leads the practitioner to submit them to treatment, almost contrary to his own judgment and expectation of beneficial result.

Such a case was Mrs. H., who was assisted into my consulting-room in an apparently deplorable state. She was attenuated, bowed together with pain, wasted and bloodless from repeated uterine hemorrhages. The neck of the uterus was a mass of ulceration, with hardness of the base and texture of the organ. A tumor could be felt offering a hard resistance over the pubes and the organ appeared enlarged to four times its natural bulk. She suffered from occasional retention of urine and the pain produced by walking or the motion of a carriage was agonizing. There was a copious fetid discharge, with excessive menstrual periods, passing into hemorrhage, which had reduced her to the lowest stage of debility; the countenance expressive of pain and bloodless, but not exhibiting the leaden or dirty discoloration so often observed in carcinoma. The size of the tumor, also, was beyond what one would expect in this. Her age was about forty, and she had had two children, the youngest twelve. She had been gradually becoming delicate, as she described it, for two years. She suffered from dyspepsia, constipation, occasional attacks of gout, chiefly in her wrists and fingers, but which had caused less inconvenience within the last two years. Her urine contained an abundance of uric acid and urates, but no albumen or excess of sugar. Her father died of gout and her mother had suffered from it occasionally. She had sleepless nights, intense lumbar pains and pelvic distress, aggravated by the pressure of the enlarged uterus on the bladder. She was consigned to my care from the country, as a case of malignant ulceration of the uterus in its advanced stage.

My first impression was, I confess, rather confirmatory of this diagnosis. But when I had thoroughly investigated the case, a gleam of hope shone upon it, and I clung to the much-increased size of the uterus, the analysis of the urine, the gouty diathesis, and her own and her family history, as offering her an escape. The ulcerated surface was cauterized freely and repeatedly with chloride of zinc, followed by nitrate of silver; repeated sloughs were thrown off. Her strength was maintained with nutritive food; a fair allowance of wine administered. The opiates, by which alone she had procured sleep, were desisted from, and hyoscyamus, colchicum, bark, iron, and Vichy water relied upon. Her general health speedily improved; the ulcer contracted rapidly, and in the course of three months healed, the uterus, at the same time, diminishing in size, relieving her from distressing pressure on the bladder;

and she returned to the country recovered and able to walk and drive without inconvenience.

The sequel of this case, however, bears a moral. She had scarcely been restored to what was to her, comparatively speaking, crude health, when the gout, which had throughout her uterine attack been nearly suppressed, or rather confined to the uterus, again threatened her, but with more determination than formerly. Not merely her fingers and wrists, her knees and her ankles and feet were successively and severely attacked, assuming the mixed gouty rheumatic character ; and when I last saw her, at an interval of some years, the fingers of both hands were fixed ; she had chalk stones and contracted joints, her knees and ankles permanently enlarged and fixed—yet the uterine inflammation and ulcer never returned ; the uterus had diminished to little more than twice its natural size and she was totally free from uterine distress.

A pendant for this case is that of a staid elderly gentleman, married to a young wife, and father of two healthy children, who consulted me for a urethral discharge, accompanied with an angry, looking ulcer at the underfold of the prepuce. He had had occasional attacks of gout, and was a convivial person, partaking generously of wine and the pleasures of the table, to which he had been more than usually exposed shortly before. His wife was under treatment for slight leucorrhœa, with a benign abrasion on the anterior lip of the os.

I stopped the husband's wine, gave him a weak zinc injection, and insisted upon frequent cold ablutions. Caustic and the zinc lotion were applied to the ulcer, whilst I put him on a course of Vichy water. Man and wife were both perfectly well in three weeks ; never had the slightest inconvenience afterwards and have since had three healthy children.—*Obstetrical Journal.*

Cauterization of the Uterine Cavity.

We transcribe the following from the *Lyon Medical* for December, 1873 :

Dr. Blanchard (thése pour le doctorat, par M. Joseph Blanchard, Paris, 1873,) belongs to the school of those gynecologists, who in uterine affections attribute much to the body of the womb. He does not admit, with Bennet, that metritis of the neck is the rule and metritis of the body

the exception. He shows, on the contrary, that the inflammation, fungosities, and ulcerations are most ordinarily found in the mucous membrane which lines the cavity of the body. Therapeutic means addressed only to the lesion of the neck are completely insufficient. The disease must be followed to the superior orifice of the cervical cavity.

Among the means to this end, M. Blanchard has specially studied astringent and caustic injections, painting the internal face of the body by means of a brush dipped in nitrate of silver or other solutions, and above all, by means of medicated pencils introduced into the womb. Among injections, he mentions those made with decoction of oak bark, tincture of iodine in water, iodide of iron, perchloride of iron, and glycerine. The author says that after this practice, he has unhappily seen a certain number of cases of peritonitis develope. These accidents are not due to the passage of some of the injection into the tubes. The experiments of Vidal De Cassis, of Klemm, Petit and Astros have shown that the penetration of the injection into the peritoneal cavity is nearly impossible in the conditions in which intra-uterine injections are made. The peritonitis is due to the presence of a peri-uterine inflammatory centre, which is lighted up by the impression produced on the uterine mucous membrane. One is protected from such accidents by carefully exploring before the operation all the points of the true pelvis, and by abstaining every time one discovers the least trace of peri-uterine inflammation. That is a formal contra-indication, which, moreover, is common to two other means of medication, which Dr. Blanchard passes in review.

Painting the uterine mucous membrane is done by means of a canula, which is placed in the cervical cavity, and through which the brush is passed.

M. Nonat and M. Courty are able in this way to paint the whole cavity of the uterus with astringent or caustic solutions, tincture of iodine or nitrate of silver.

The introduction of medicated pencils into the uterine cavity has most particularly fixed the attention of M. Blanchard. MM. Becquerel and Rodier have employed long pencils composed of gum tragacanth, mixed with alum, sulphate of copper, sulphate of zinc, or tannin. This last substance alone has given good results.

Recourse has been had to pencils of nitrate of silver. But the caustic which M. Blanchard prefers is a mixture of nitrate of silver and nitrate of potash. These are the pencils which he has seen used in the service of M. Laroyenne. He describes with care the operative preceding

precautions of the able surgeon of La Charité. He establishes the indications and contra-indications of this method of treatment, relates six cases of cure obtained in cases of chronic metritis, and terminates his interesting work by the following conclusions:

1. Introduced into the uterine cavity, the pencil of nitrate of silver and potash is a completely inoffensive agent.

2. It may be left in the cavity, if it be necessary to profoundly modify the mucous membrane.

3. Its employment is formally contra-indicated in all inflammatory states of the uterine annexes or adjacent tissues.

4. Its application has been followed by cure in cases of abundant leucorrhœa, chronic metritis of a hemorrhagic character, and occlusion of the internal orifice of the neck, with retention of the secretions.

5. In the case of metritis developed under the influence of a fibroma or deviation of the uterus, it gives marked ease, and often causes the disappearance of the greater part of the symptoms; but not acting on the cause, it does not save the patient from relapses.—*Obstetrical Journal.*

The Delivery of the Placenta by Supra-Pubic Pressure.

Judging from our own experience and from the number of laudatory papers on this subject, Credé's method of delivering the placenta, or some slight modification of it, bids fair to take the place of every other. The plan which we adopt is as follows: At the maximum of the first uterine contraction after birth of the child, the fundus of the womb is grasped through the abdominal wall, between the thumb in front and the fingers behind. It is then to be both forcibly squeezed and at the same time pressed downward and backward. By means of this uterine expression the placenta and membranes are usually at once detached and extruded. Sometimes, indeed, they will suddenly pop out of the vulva, just as the stone escapes when a cherry is compressed between the finger and thumb. Occasionally it will require two or more pains to effect this; but the sooner this plan is resorted to after the birth of the child, the more easy in execution will it be. Those who, like ourselves, practice this method, contend that it offers many advantages over any other. The risk of communicating any

puerperal disease is lessened. The expulsion of the placenta and membranes by a *vis a tergo* is more likely to be complete than by traction on the cord, which cannot be broken, as no traction is made on it. Adherent placenta is less frequently met with. The introduction of the hand into the womb is avoided, and so, also, as a consequence, is the ingress of air. Finally, the tonic and energetic contraction of the womb, following this manœuvre, prevents the occurrence of hemorrhage or of unruly after-pains.—*Medical Times*, October, 1873.

Extirpation of the Inverted Uterus.

Professor Martini Barta (*Il Morgagni*, xiv 8, e. 9, p. 594, 72,) relates the following case: A woman in her second labor had complete inversion of the uterus. The labor was very quick and the cord was twisted round the neck of the child. The uterus at first was protruded through the *ostium vaginæ;* it was pushed back and did not again appear externally. For three months after this she had very severe menorrhagia, which persisted in spite of all hæmostatics. Dr. Barta found the vagina filled by the enlarged and inverted uterus; the mucous membrane of the uterus appeared to pass directly into that of the vagina. As the continued loss of blood was endangering the woman's life, Dr. Barta determined to remove the inverted uterus. This was done in fifteen minutes, by Chaissagniac's écraseur; very little blood was lost. A fainting fit came on directly after the operation, which lasted seven hours; peritonitis followed, which continued fourteen days. The patient left for her home on the twenty-second day after the operation. She was seen on the fortieth day and was then quite well. The tumor removed consisted of the fundus, body and neck of the uterus, except the vaginal portion. A portion of the Fallopian tubes, about five cm., was attached to the uterus; also, a part of the broad and round ligaments. The tissue of the uterus was normal, except being slightly softened. On examination, the vagina and the vaginal portion of the neck were healthy; the finger entered a hole the size of a hazel nut, but no communication with the abdominal cavity could be detected.—*Obstetrical Journal.*

Ophthalmology and Otology.

Muscular Advancement (Powers of Re-adjustment) by Means of the Double Thread.

By L. DE WECKER, M.D., Paris, *Annales d'Oculistique*, December, 1873.
Translated by N. MARTINACHE, M.D., San Francisco.

In works on ophthalmology, and particularly in treatises on ocular surgery, muscular advancement (the process of re-adjustment) is seldom recommended to be used except in cases of secondary strabismus (resulting from an anterior tenotomy, which had been imperfectly performed) and paralytic strabismus. From this we can easily see that none of the treatises describe a process of re-adjustment in which the recession of the opponent muscle is not an integral part.

In the statistics published of operations performed in the great ophthalmological clinics, it is stated that the number of operations for re-adjustment amounts to only one-tenth part of those for retrocession, which is explained thus: The cases of strabismus (secondary and paralytic) which were reserved for the operation of advancement, are much rarer than the cases which are thought to be best treated by means of muscular recession; besides, because a large number of cases which are treated by tenotomy of the opponent muscle are removed from the list of secondary and paralytic strabismus, and are only healed by bringing forward when the first operation has proved insufficient.

The reason why advancement of the insertion of the muscle has been restricted to so small a number of applications, in spite of the improvements effected by Mr. Critchett, is that, compared with recession, it is a more complicated operation, giving rise to a more serious traumatism; the section of the two tendons must be made, and several sutures used.

Notwithstanding this, it is undeniable that in augmenting the muscular force rather than in weakening it we are following more nearly the principles of conservative surgery.

There are numerous cases of squint caused by muscular weakness (myopic strabismus) in which it is in every respect more rational to remedy the defect by giving a surplus of strength which will make the insufficiency disappear, than by simply palliating it by weakening the opponent muscle.

If these are the true principles, why not follow them? The reason why they have not been followed is, that it is so much easier to abstract force than to give it, and that whilst in a case of divergent myopic strabismus, we can cut the right external rapidly and easily, we can only advance the right internal with difficulty and slowness. But as the labor of the surgeon and the suffering of the patient are no greater, no one should hesitate between advancement and recession, and the former should certainly be preferred.

Now it must not be supposed that we are simply theorizing; a practical application will show the superiority of re-adjustment. The palpebral orifice of an eye affected with divergence (especially when the eye presents a considerable degree of myopia) is generally larger; it is a well known fact that muscular retrocession increases the size of the orifice still more. In correcting the divergence, we then aggravate the condition of the orifice, which becomes much more apparent when the position of the eyes is correct.

On the contrary, the advancement combats effectually the widening of the orifice, and cures, with the deviation, the apparent exophthalmos.

Muscular advancement, if we have a process as simple, or almost as simple, as that for recession, is then incontestably preferable in all cases of strabismus depending on want of muscular power.

We have been endeavoring to work out this problem for some time past and we believe we have succeeded in simplifying the process. The simplifications bear:

Firstly—On the suppression of the retrocession of the antagonistic muscle;

Secondly—On the suture of the muscle and the traction for its advancement.

Our personal experience has proved to us that bad cases of secondary strabismus can be cured by simply bringing forward the tendon, which remained too far behind after the first operation. Evidently, in cutting the antagonistic (the right external in a case of divergent secondary strabismus), we facilitate the approach of the right internal tendon towards the edge of the cornea; but on the other hand, in opening the conjunctiva, the sub-conjunctival tissue and the capsule of Tenon, for the section of the right external, we sensibly weaken the resistance of the points which should serve as a support in drawing forward the tendon of the muscle to be advanced.

In a case of advancement of the right internal, for instance, if we first cut the right external, the whole of the external envelope of the globe (the conjunctiva, the sub-conjunctival tissue and the capsule of Tenon) will be displaced and drawn towards the large angle of the eye, at the moment when the sutures which are intended to draw the tendon towards the border are closed above and below the edge of the cornea. But if we leave the envelopes intact round the external circumference of the cornea, we find a solid support to advance the detached muscle, even as far as the edge of the cornea. By this means we gain all that the section of the antagonistic allows for the advancement, and considerably simplify the operation, as well as the traumatism.

There is no doubt that we diminish the palpebral opening much more by advancement without recession of the antagonistic, than by the old method. We may say then that we reduce the muscular advancement to a simple detachment of the tendon of a muscle, with the employment of two sutures. The difference between this operation and simple strabotomy only consists in the addition of one suture, as many operators close the conjunctival wound with one.

A second important point is to find a kind of suture which will graft the muscle exactly in front, avoid any false

direction of the tendon and consequently any defective inclination from the meridian, and also avoid the diplopia which might follow.

In other words, we must find a double suture, which by equal traction will draw the tendon directly towards the edge of the cornea, by giving an equal movement to the superior and inferior extremities of the tendon.

PREPARING FOR THE OPERATION.

Besides the ordinary strabotomy instruments, the surgeon must be provided with a strong, but thin, silk thread, with three needles attached, one at the middle of the loop which is formed in doubling, and one at each end of the thread.

THE OPERATION.

Having inserted the separator, and, in case of advancement of the right internal muscle, directed the eye strongly outwards, the conjunctiva is seized near the internal edge of the cornea, and an incision is made along the edge for a length of about 10 to 12 millimetres. Then the conjunctiva is detached above the insertion of the muscle to near the caruncle, so as to take, by a single movement of the large hook, the entire muscle on the instrument. The tendon is carefully detached by grazing the sclerotica, by means of the small hook, being careful that no portion of the tendon adheres to the sclerotica. If there is any adherence, the large hook should be given to an assistant and held so that the muscle and conjunctiva are suspended; the detachment is completed by means of the small crotchet and the scissors, as far as the upper and lower ends of its insertion. If, as sometimes happens, the muscle, after being completely detached, slips with the conjunctiva, and escapes off the large hook, the tendon and conjunctiva are easily caught by means of the forceps; it is totally unnecessary for that purpose to "plunge the forceps into an obscure depth." (Schweigger—*Handbook of Oculistics*, second edition, 1873, page 185.) The hook which holds the muscle is lifted up, and the muscle and conjunctiva are pierced by the needle with the double thread from

within, outwards. The needle should penetrate at a distance of 3 or 4 millimetres (1 1-5 to 1 3-5 lines) from the detached edge of the tendon and exactly in the middle of the muscle. The two other needles are passed through near the ends of the wound in the conjunctiva, and emerge at 3 or 4 millimetres above and below the upper and lower edge of the cornea, as shown in the figure. The threads are cut near the needles and the two sutures are tied. Two threads of different colors may be used, so that the ends which belong to the same thread may be distinguished. A bandage is then applied.

In order to increase the effect of the operation, the double-threaded needle can be passed through further from the detached edge of the muscle.

A larger hold of the conjunctiva may be taken with the other two needles, without taking any notice of the circumstance that the conjunctiva, after the closing of the sutures, is drawn over two-thirds of the cornea.

There is some danger lest the needle should slip from the thread whilst hanging down, and to avoid this I use Mathieu's double-eyed needle.

I leave the sutures for three or four days; occasionally, however, I remove them in 48 hours, if there is much conjunctival secretion or there is much pain. The patients generally complain of a slight traction of the eye, but this only lasts for a few hours, and disappears under the bandage, so that the next day they feel as well as if they had only undergone a simple tenotomy.

The conditions for the operation are the following:

1. Divergent strabismus (myopic) from want of power of the right internal muscles. Here it should replace the operation by recession, not only because the latter is irrational, but because it often fails.

2. Paralytic strabismus—when the indications for the recession of the antagonistic muscle, or for the advancement of the paretic muscle, are furnished by a partial return of the muscular function, or by a complete stoppage of the partial cure.

3. In secondary strabismus, when the retraction of the antagonistic muscle is not very marked, and, when it is completely relaxed—*i. e.*, when the patient looks strongly to the side where the section of the muscle was formerly made—it permits the cornea to come to the middle of the palpebral opening. I admit, then, here a complete absence of action of the strongly drawn back muscle on the displacement of the centre of the cornea; in this case, the correction may be perfect without the necessity for attacking the antagonistic. As to the forms of concomitant convergent strabismus of a hypermetropic nature, which can be treated by muscular advancement, I have not sufficient experience in them at present to be able to give an opinion.

If pains is taken to compare this simple process by the aid of the double thread with the diverse methods recommended up to the present time, the difference will be found to be great. As to the utility of our system, we can affirm that it is, at least, equal to the other methods.* As to diminishing the opening and the reduction of a certain degree of exophthalmia, muscular advancement, without recession of the antagonistic muscle, is incontestably superior to any process hitherto employed.

ADMINISTRATION OF ETHER.—At the Bellevue Hospital, New York, the administration of potass. bromid. gr. xxx, previous, and the same amount immediately following, or as soon as the patient can conveniently swallow, after the administration of sulphuric ether for the purpose of producing anæsthesia, is now regularly resorted to. The effect is to prevent the vomiting which so commonly follows the use of the anæsthetic.—*Medical Record*, January 1st, 1874.

* It is evident that traction applied by the suture which is here recommended, and which acts on the middle of the tendon, drawing the muscular insertion in the direction of the transverse diameter towards the edge of the cornea, is more powerful than that of two sutures, which, being attached to near the edges of the muscle, draw the edges separately each to its own side. By placing the double thread exactly in the middle of the tendon, and by passing the thread which traverses the conjunctiva symmetrically near the edge of the cornea, a regularity of traction and an equality in the displacement of the tendon is obtained, which is impossible with lateral and isolated sutures. It is of the utmost importance, and the experience of Mr. Snellen confirms my position, that in the displacement, advancement or retirement of the tendon, the cure should take place by giving the tendon a new insertion, which should be perfectly parallel with the old one.

Editorial.

A Move in the Right Direction.

Under the above caption, in the June number of the WESTERN LANCET, we commented on the resolution presented by Dr. Oatman, of Sacramento, to the State Medical Society, at its last session, and by them unanimously passed. The resolution read as follows:

Resolved, That it is the duty of and we hereby recommend to the Legislature of California to pass a law making it a misdemeanor for a person, for any purpose whatever, who is not a graduate of some institution of learning authorized by law to confer the Degree of Doctor in Medicine, who shall place before or after his or her name, in any manuscript, label, wrapper, card, handbill, circular, newspaper, pamphlet, magazine, book or any advertisement, the word "Doctor," or the abbreviation M. D., or Dr., or any others signifying directly or constructively that the person is a graduate of such an institution, or who shall authorize or sanction the same by others in his or her interests; and that any person found guilty of such misdemeanor shall be punished by a fine of not less than —— dollars or imprisonment for not less than —— years, or by both such fine and imprisonment.

The State Legislature has now been in session upwards of three months, and as yet we have heard nothing of the introduction of a bill which embodies the ideas of this resolution. Is it that the matter has been canvassed by the members of the Society living at Sacramento and found to be impracticable, and consequently has withdrawn it? or has it been presented and killed in Committee? What is the matter? Surely nothing appertaining to the profession and welfare of the whole people will be acted on this session that can be compared to this in importance.

Will not our brethren in Sacramento look to it and see that some action be had in the premises? and will not such of our legislators as feel an earnest interest in the cause of health and the protection of the people against imposition and ignorance give it their determined support and assistance?

In our editorial of June we wrote as follows:

Perhaps in no State of the Union does quackery "run riot" as in California; nowhere that it reaps such rich reward; nowhere that it is countenanced by the (in other matters) intelligent people to the same extent; nowhere that the audacity or impudence that characterizes the charlatan, whether it be the nostrum vendors on the corners of our streets, that make "night hideous" by their bawlings, or the more genteel but proportionately dangerous pretender, that reclines on his satin-covered ottoman, surrounded by gilded walls and attended by a retinue of servants, is encouraged in the same degree; nowhere that signs stretching from building to building, emblazoned with Dr. ——, M. D., Astrologer and Physician, would in the same manner be permitted; nowhere that newspapers seem to have such an utter disregard for the interests of the populace in this direction; nowhere that respectable men allow themselves to be used through the furnishing of certificates of miraculous cures to dupe others, or bolster and encourage the deception practiced by these tinseled mountebanks; and hence, nowhere that these shameless things make so strong an appeal in behalf of the unwary sufferer and humanity in general, for the protection which the law-makers have it in their power to furnish, through the enactment of a law or statute, which shall embody the ideas contained in the resolution of Dr. Oatman.

When may the people of California look with confidence to their Legislature for such laws bearing on this and similar questions as will prove wholesome? When will the strong arm of the law be outstretched to protect the stranger—the sick man in his anxiety for health, grasping at straws—from the snares besetting him on every hand?

It may be reasoned by some, as it has been many times in our legislative halls, that any law which is specially protective, or that shall extend itself to one class only, is unconstitutional; a reasoning which is in itself specious, advanced usually by such as are to be affected by it, but which we contend is not tenable in anywise. But if it be so, if it is that the people cannot secure to themselves, through their representatives, because of constitutional disabilities, that safety which wholesome laws afford—then say we, *amend* the Constitution, as has been done before, that the greatest good may be vouchsafed the greatest number.

Or if it be as we suspect, that all efforts at legislative action heretofore has failed because of the venality of those

whom we had the right to turn to for aid—then we say, let the people look to it that none are sent to represent them who are not in fact and in truth representative.

Let every diplomated doctor in the State interest himself in this matter, using his efforts to secure the selection of such men, who, when they reach the legislative halls of the State, will not forget or be influenced prejudicially in their obligation to the people who sent them there.

We honor Dr. Oatman for the stand he has taken, and hope that, living as he does at the Capital, he will, with the co-operation of the loyal members of the profession (of which class there are many in Sacramento, who will, we feel assured, with the unanimity and earnestness which so distinguishes them), use every effort to secure the passage of a proper statute, which shall, in its operation, carry out the intention of his resolution, and we here pledge the support of THE LANCET in their laudable efforts.

We hope to be pardoned for reproducing the above, and offer as our apology the importance of the subject just at this time, whilst the Legislature is in session. And in conclusion, we invoke the earnest aid of our Sacramento physicians, to the end of securing the passage of some law which will secure the object of Dr. Oatman's resolution.

Low Standard of Literature in Journalism.

In our February number, under the above caption, we replied to a very weak and ungenerous attack made upon us in the *Pacific Medical and Surgical Journal* of the same month, in which we were accused of using the third person plural, when we should have used the third person singular —a very common error and one undeserving the space and time allotted to it by our contemporary.

We took occasion, in the course of our reply, to say that "life is too short and *our time too valuable* to be passed in parsing every sentence of another's composition," and also that we were inclined to think that a very casual glance at our critic would doubtless prove it to be amenable, in a larger degree possibly, and in the same direction.

The very day after the LANCET was issued, our attention was called by one of the warmest friends of the *Pacific Journal* to an article in its editorial department, under the caption of "False Facts." We submit that, whilst this expression is very commonly used, yet it is very far from being grammatical, and ought not to have appeared in the columns of a journal whose editor is so hypercritical.

For reasons already stated, we do not propose to discuss this or any of many like errors of the *Journal*, but have alluded to the fact that it may admonish its editor to deal with the matter of the LANCET, rather than the grammatical construction of its sentences, and further to remind him of an old adage, viz.: "That those who live in glass houses should never throw stones."

Pharmacopœia Germanica.

CARLISLE, Pa., February 6th, 1874.

R. BEVERLY COLE, M.D. :—*Dear Sir :*—I thank you for the January number of the WESTERN LANCET, with a notice of my translation of the German Pharmacopœia, and allow me to call to your attention the unintentional error you have fallen in by saying: "It is greatly condensed from the text of the original." The fact is, it is a *complete* translation from the *entire* text of the original, together with an appendix, and the index of systematic names, which I added thereto. By making this correction you will oblige,

Yours, very truly,

C. L. LOCHMAN.

We are pleased to have our attention called, through the above letter of the translator, C. L. Lochman, to an error inadvertently made in our notice of the *Pharmacopœia Germanica*—a copy of which he was pleased to send us—and hope our explanation may be satisfactory.

THE relief that is afforded to want, as want, tends to increase that want.—*Whately.*

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during December, 1873.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	424	59	40	24	5	81	8	S. F. B'd of Health.
Sacramento	32	5	0	1	0	2	0	Sac. B'd of Health.
Petaluma	4	2	0	0	0	0	0	Dr. G. W. Graves.
Dixon	0	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	7	1	1	2	0	0	0	Stockton B'd Health.
Marysville	16	2	3	2	0	0	0	Dr. C. E. Stone.
Placerville	3	0	0	0	0	0	1	Dr. E. A. Kunkler.
San Diego County	...	..	..	..	.	..	..	Dr. T. C. Stockton.
Oroville	0	0	0	0	0	0	0	Dr. J. M. Vance.
Oakland	...	..	..	..	.	..	..	Dr. T. H. Pinkerton.
Los Angeles	22	4	1	2	0	1	0	Dr. H. S. Orme.
Truckee	2	0	0	0	0	1	0	Dr. Wm. Curless.
St. Helena	0	0	0	0	0	0	0	Dr. J. S. Adams.
Napa City	8	1	2	0	0	0	1	Dr. M. B. Pond.
Watsonville	...	..	..	..	.	..	..	Dr. C. E. Cleveland.
Folsom	1	0	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	5	1	0	0	0	0	0	Dr. C. L. Anderson.
Suisun, Fairfield	...	..	..	..	.	..	..	Dr. S. D. Campbell.
Colusa	5	1	1	0	0	0	1	Dr. Luke Robinson.
Trinity County	5	0	0	1	0	0	0	Dr. J. C. Montague.
Santa Barbara	11	1	0	0	0	0	0	Dr. C. B. Bates.
Redwood City	4	2	0	1	0	0	0	Dr. Kirkpatrick.
San Andreas	1	0	1	0	0	0	0	Dr. C. B. Robertson.
Auburn	1	0	0	0	0	0	0	Dr. A. S. Dubois.
Tulare County	0	0	0	0	0	0	0	Dr. M. Baker.
Siskiyou County	5	2	0	0	0	0	0	Dr. T. T. Cabanis.
Ione City	1	0	0	0	0	0	0	County Recorder.
Placer County	5	2	0	0	0	0	0	County Recorder.

Remarks.—While we are pleased at the present writing (February 25th), to be able to state that the epidemic of Scarlatina is rapidly abating in our metropolis, it is, at the same time, a matter of regret to find, that, in the discharge of our official duties, we have been the innocent cause of acrimonious disputation among others, actuated by the

same motives as we have been. In recommending "isolation, even to the temporary suspension of our public schools," as the only effective prophylactic for the arrest of Scarlet fever, we were only echoing the advice of the highest sanitary authorities. For although a great deal of study has been given to the investigation of the communicability of Scarlatina, we must confess that this disease has baffled all analysis, and that all other measures taken to prevent its propagation or spread have proved fruitless. Judging from the information that has reached this office, its type has not been very malignant, but we have no other means of measuring its prevalence except by the death-rate. Now it is very desirable to find out the sickness-rate of this, as well as of other diseases; but in cities or large towns, where there are many physicians, this is almost impossible. In small towns or villages, however, where there are only one or two physicians, who are acquainted with the condition of health in every family, a very close approximation to the absolute truth may be reached. With the aid of the invaluable little handbook of the Drs. Elmer, our correspondents from the country could, with very little trouble, furnish the information we desire, not only as regards the disease in question, but also all other diseases. Many positive statements are to be found in the writings of Sanitarians concerning the ratio of the sick to the well, but they differ so widely from each other, as to be little better than guesses. A careful record of the sickness-rates in a number of our small towns would enable us to estimate, with a near approach to certainty, the proportion of persons constantly sick throughout the State, and prove a valuable addition to sanitary knowledge.

THOS. M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

SUSPICIONS among thoughts are like bats among birds: they ever fly by twilight.—*Bacon.*

Monthly Report of Deaths Registered in San Francisco during January, 1873.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	11	....	2	5	4	....	..	5	6	4	6	....	1
Measles	1	....	1	....	....	....	..	1	....	1	....	....	....
Scarlatina	47	...	36	10	1	....	..	23	24	43	1	....	3
Diphtheria	6	....	5	1	....	....	..	4	2	5	1	....	....
Croup	2	....	2	....	....	....	..	1	1	2	....	....	....
Whooping Cough	1	....	1	....	....	....	..	....	1	1	....	....	....
Typhus and Typhoid Fevers	5	....	1	3	1	....	..	5	....	4	....	....	1
Diarrhœa and Dysentery	1	....	....	1	....	....	..	....	1	1	....	....	....
Cholera Infantum	1	....	1	....	....	....	..	....	1	1	....	....	....
Cholera Morbus	....	....	....	....	....	....	..	....	....	....	....	....	....
Pyemia and Septicæmia	4	....	....	....	2	2	..	4	....	....	1	1	2
Cerebro-Spinal Meningitis	1	....	1	....	....	....	..	1	...	1	....	....	....
Syphilis	3	....	....	....	3	....	..	1	2	....	1	....	2
Alcoholism	4	....	....	....	4	....	..	3	1	....	3	....	1
2—Cancer	3	....	....	....	1	2	..	3	....	....	1	....	2
Phthisis Pulmonalis	61	....	1	6	50	3	1	39	22	5	11	10	35
Hydrocephalus & Tubercular Meningitis	5	....	3	2	...	....	..	3	2	4	1	....	....
3—Encephalitis	14	....	10	1	3	....	..	11	3	8	2	....	4
Apoplexy	7	....	....	....	2	3	2	4	3	....	....	....	7
Convulsions	12	....	10	1	1	....	..	10	2	10	1	....	1
Other Diseases of the Nervous System	23	....	6	1	8	7	1	19	4	6	4	1	12
Aneurism	5	....	....	....	5	...	..	3	2	...	2	....	3
Diseases of the Heart	15	....	....	....	8	5	2	10	5	....	3	....	12
Pneumonia	28	....	7	1	14	5	1	20	8	8	4	....	16
Bronchitis	5	....	2	....	2	1	..	2	3	2	1	....	2
Other Diseases of the Respiratory Organs	10	....	5	1	....	3	1	7	3	6	1	....	3
Diseases of the Stomach and Bowels	8	....	2	....	6	....	..	6	2	2	1	....	5
Diseases of the Liver	6	....	....	....	5	1	..	2	4	....	2	....	4
Bright's Disease and Nephritis	4	....	2	....	...	1	1	3	1	2	....	....	2
4—Puerperal Diseases	3	....	....	1	2	....	..	....	3	....	1	....	2
Atrophy and Inanition	24	....	13	1	....	3	7	12	12	13	5	....	6
5—Suicides	6	....	...	....	5	1	..	5	1	....	2	....	4
Deaths in Institutions	69	....	5	4	43	13	4	55	14	7	13	3	46
Still-Births	....	....	....	....	....	....	..	10	10	....	....	....	....
1—Zymotic Diseases	90	23.02	51	20	16	3	..	49	41	64	13	1	12
2—Constitutional Diseases	74	18.93	6	9	53	5	1	49	25	12	14	10	38
3—Local Diseases	143	36.57	44	5	57	29	8	99	44	44	22	2	75
4—Developmental Diseases	34	8.69	19	2	3	3	7	18	16	19	6	....	9
5—Deaths from Violence	22	5.63	2	1	16	3	..	17	5	3	4	....	15
Deaths from Unknown Causes — Chinese	26	6 65	....	....	23	3	..	25	1	....	....	26	....
Deaths from Unknown Causes — Others	2	.51	1	....	....	....	1	1	1	....	1	....	1
Total	391	.....	123	37	168	46	17	258	133	142	60	39	150
Per Cent. to Total Mortality	....	100.00	31.46	9.46	42.96	11.77	4.09	65.98	34.02	36.32	15.35	9.97	37.08

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Some Attempts at Human Anaplasia by Means of Mucous Grafts taken from the Cheeks and Tongues of Rabbits and Oxen.

BY DR. HOUZE DE L' AULNOIT, of Lille.
[Translated from the French by Mary C. Putnam, M. D.]

My intentlon in this note is to call the attention of the Academy to the results that I have obtained in transplanting on man pieces of mucous membrane taken from the buccal cavity of the rabbit and the ox. One of the principal inconveniences of the human dermo-epidermic graft, as it has been employed by Reverdin (*Gaz. Med. de Strasbourg*, 1870; *Archives Gen. de Mea.*, 1872), Ollier, (*Gaz. Hebl.*, No. 8, 1872), L. Le Fort Gosselin (ibid.), Demarquay (ibid.), Pollock, Nelson, Rouge, and Bercaru (These, August 7, 1872, Paris), is to cause pain to the patients by submitting them to a slight operation, with out danger it is true, but disagreeable enough to be refused by some, thus obliging the surgeon to take the grafts from his own person.

I had thought then since the month of November, 1871, of taking from an animal, as had already been done by the advice of Bert (*These sur la Graffe, Animale*), Coze (Communication to the Institute, the 28th February, 1872), who cut cutaneous grafts from a rabbit, and Debreuill, from Guinea-pigs. But in order to approach the physiological conditions of the human skin, I intended to make graft from the mucous membrance of some animal. I communicated my idea, on the 30th of April, to Professor Verneuil, and, as I mentioned the rabbit among the animals most suited to this class of experiments, he advised me choose a rabbit raised in the country, as offering more plasticity than those brought up in our great cities.

I began by experiments on the 1st July, 1872, and I placed on several patients fourteen little mucous grafts, coming either from the cheek or the tongue of the rabbit.

Twice, moreover, I took grafts from the lingual mucous membrane of an ox, killed hardly an hour before. As the result was negative, I will pass over these two attempts in silence, and in this note only insist on the fourteen preceding experiments.

A few words on the method of operation that I followed.

Before detaching the mucous membrane, I killed the animal by holding it by the hind legs, and striking it on the back of the neck; then, by means of two sections made with

scissors, I removed the skin of the cheek, and dissect, with pincers and a bistoury, from its internal face, piece of mucous membrane that should be applied to human tissues. The method of MM. Ollier and Reverdin, would cause less dragging on the parts, and be followed, I think, with similar results. It suffices to drag the tongue forwards, after having separated the maxillæ, in order to lift up the lingual mucous membrane, previously fastened on a piece of cork with some pins. I avoid as much as possible leaving any muscular tissue on its adherent face. These severed grafts, divided into others smaller, from five millimetres to 2-3 centimetres, have been immobilized on wounds, sometimes with bands of muslin covered with collodion at their internal face, or merely at their extremities, sometimes with cotton-wool slightly compressed by a few bands of diachylon. In some cases I tried covering them with oiled silk of very thin pieces of lead, at the same time applying a light and gentle compression.

Immobility is a condition, *sine qua non*, of success. It is impossible to insist too much on its advantages or its inconveniences, according as one employs collodion, cotton or diachylon strips. I propose in a forthcoming memoir to discuss these various methods of treatment. Perhaps it would be possible to fasten the grafts, when they are extensive, with some points of silk suture, made with very fine needles. The strips of diachylon, with or without cotton-wool, merit the preference when their application is possible, but on condition that one may rely on the docility of the patients, and that the tissues remain motionless, at least during the first days. It is because I did not take sufficiently into account these precepts and the state of the wounds,—conditions which have only been revealed to me by experiment,—that I have only succeeded five times; that four times I have had a doubtful adhesion; and that I have failed in the other five cases.

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Conclusions.—From these first experiments of animal anaplasty, by means of the lingual and buccal mucous membranes, I think I may deduce the following conclusions:—

1. Mucous grafts taken from the cheek or tongue of the rabbit, like the dermo-epidermic grafts from the human skin, can take root in human tissues.

2. They may be applied during the bleeding and granulating periods; never during the period of suppuration.

3. New researches are indispensable in order to learn the best method of immobilization, and the epoch at which

the first dressing should be removed—epoch that I fix at the second or third day.

4. At the moment that vascular alhesions are formed, the epidermis separates, the dermis inflames, softens, disintegrates, loses its physiological properties, and becomes a true pathological tissue, having some resemblance to cicatricial tissue, but without the retractility. Microscopical examination indeed shows destruction of the glandular system.

5. Adhesion, in my fourteen experiments, only took place five times, and four times the result was doubtful.

6. Two attempts with the tongue of an ox were negative, on account of the condition of the wound or nature of the dressing.

These researches, although extremely incomplete, will induce, I hope, physiologists and surgeons to have recourse to the mucous membrane of an animal; but I think that, in order to prevent reabsorption, it would be best to borrow as much as possible from an animal approaching the size of a man.—*Archives of Scient. and Pract. Med.*

Book Reviews.

A DICTIONARY OF MEDICAL SCIENCE, with the Accentuation and Etymology of the terms, and the French and other Synonyms. By Robley Dunglison, M.D., LL.D.; late Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, etc. A new edition; enlarged and thoroughly revised by Richard J. Dunglison, M.D. Philadelphia: Henry C. Lea; San Francisco: A Roman & Co.

It is needless for us to say that, of all medical lexicons extant, the work before us is the most concise, and at the same time most comprehensive in the English language. Dunglison's Dictionary is as widely known as the science of medicine. The present edition, revised and enlarged by his son, is unquestionably the perfection of lexicons. Although the original work has been for many years recognized as *the* authority, the present edition is far superior,

inasmuch as it has been brought up to the present moment, and, to use the editor's own language in the preface: "Certainly in no former revision have the alterations and additions been so great as in this."

"The present edition includes more than *six thousand* subjects and terms not embraced in the last, and although the capacity of the page has been enlarged, the volume has been increased by one hundred pages."

These statements establish the fact beyond doubt that, as a book of reference, Dunglison's Dictionary is incalculably valuable, and indispensable to every practitioner of medicine, pharmacist and dentist.

A UNIVERSAL FORMULARY, CONTAINING THE METHODS OF PREPARING AND ADMINISTERING OFFICINAL AND OTHER MEDICINES. The whole adapted to Physicians and Pharmaceutists. By E. Eglesfeld Griffith, M. D. Third edition. Carefully revised and much enlarged. By John M. Maisch, Phar. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. With illustrations. Philadelphia: Henry C. Lea; San Francisco: A. L. Bancroft & Co.

Griffith's Formulary is familiar to every one engaged in the practices of medicine. For upwards of a quarter of a century it has been recognized as a standard authority by both physicians and pharmacists, and whilst it is the equal of the United States Pharmacopœia in every respect, is superior to it in its comprehensiveness.

The present editor has in his revision of the work deprived it of nothing important, and added much of value, thus rendering the present edition superior to either of the preceding, and enhancing its worth to the professions of Medicine and Pharmacy three-fold. To be without a copy of "Griffith," for reference, is tantamount to being without a work on practice.

BARNES ON WOMEN. A Clinical History of the Medical and Surgical Diseases of Women. By Robert Barnes, M. D., London; Fellow and Lumleian Lecturer (1873) Royal College of Physicians; Examiner in Obstetrics

and the Diseases of Women at the University of London and the Royal College of Surgeons, etc., etc. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

The name of our author will be recognized by every reading physician in America as being closely associated with the great science of Gynecology, and as being perhaps, at the present time, foremost amongst British authorities on Obstetrics.

To say that this new work of Dr. Barnes is complete (in the full sense of the expression) would be superfluous; to say that it is written in an intelligent and pleasing style would add nothing to the already exalted reputation of its author, since all who feel an interest in the study of the subjects of which he treats are necessarily familiar with his style and the inherent value of everything that he writes.

The typography and cuts with which the work is illustrated are above the standard of similar American works, and reflect credit upon its publishers. Its text is replete with instruction, and the book should be in the hand of every student in Gynecology, whether it be the pupil, practitioner or teacher.

BELLAMY'S GUIDE TO SURGICAL ANATOMY: Being a description of the most important Surgical Regions of the Human Body, and intended as an introduction to Operative Surgery. By Edward Bellamy, F.R.C.S.; Associate of King's College, London; Senior Assistant-Surgeon to the Charing Cross Hospital; Surgeon to the Royal Infirmary for Children, and Teacher of Operative Surgery in the Medical School of Charing Cross Hospital. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

This volume, which has just been issued from the well-known publishing house of H. C. Lea, is, as the author announces, intended as a guide to students, and fills a *hiatus* long felt by those preparing for their final examination.

Whilst it is true that a systematic course of instruction in practical anatomy is given in most of our medical

schools, yet it is equally true that but little time is devoted to instruction in regional anatomy, which latter is of more practical importance to the surgeon than all that is known of general anatomy. Such a book, then, as we have before us, written in an agreeable style, and at the same time characterized by conciseness, is an invaluable work for either the student or the practitioner, when contemplating and preparing for an important operation.

THE DISEASES OF THE PROSTRATE: THEIR PATHOLOGY AND TREATMENT. Comprising the Jacksonian Prize Essay for the year 1860. By Sir Henry Thompson, F.R.C.S.; Surgeon Extraordinary to H. M. the King of the Belgians; Surgeon and Professor of Clinical Surgery to University College Hospital; Fellow of University College; Honorary Corresponding Member of the Societe de Chirurgie of Paris, etc., etc. Fourth edition. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

Of authors extant, Sir Henry Thompson stands first on the Diseases of the Urinary Organs. His vast experience and close observation have made him deservedly the most noted in this direction, and the popularity to which his work has attained is without precedent, this being a fourth edition. The lithographic plates with which the book is illustrated, as well as the typography, are excellent, and the work is one worthy of a place in the library of every practitioner.

TRANSACTIONS OF THE TWENTY-THIRD ANNIVERSARY MEETING OF THE ILLINOIS STATE MEDICAL SOCIETY.

The volume of transactions before us is certainly, in point of typography and general appearance, the most perfect of any similar work we have seen. In looking over its pages, we discover that, at least in Illinois, they have a State Medical Society of which the profession should feel proud, and the life or vitality of the association is noticeable in every page. Never before have we seen as much of merit recorded as this volume of two hundred and sixty-

eight pages furnishes as the transactions of a State Society, and we heartily congratulate the "State of Plains" upon the possession of so perfectly organized and evidently industrious State association, and the Society upon being unmistakably (as this volume proves) appreciated by the authorities and leading citizens of the State.

Dr. Worrell's address of welcome, Prof. E. Andrews' address, the address of Isa J. Bloomfield, Esq., Mr. Jackman's address, and the address of Mr. Spencer, together with the responses of Dr. W. P. Pierce, Senator A. L. McArthur and Dr. B. G. Gulver, are worthy of their authors, and exhibit that interest and sympathy, which evidently does in Illinois, and should everywhere exist between the liberal professions.

Space does not admit of our reviewing the several reports, but we shall take pleasure, at some future time, in culling much of interest and importance from them, and presenting the same to our readers.

HOMOCULTOLOGY: An Essay.

This curious composition, emanating from a publishing house in New York, is, as will readily be surmised from its title, an attempt to solve the great problem: The best method of cultivating or improving the human race.

The whole question is cursorily discussed by the author, whose name does not (for reasons best known doubtless to himself) appear, but the deductions at which he arrives may be summed up as follows: That, as the brute creation may be or are improved by "breeding," so man may be; that, as criminals, to wit: murderers, thieves, highway robbers, etc., also, such of the human family as are incurably diseased—with syphilis, scrofula, consumption, etc.—reproduce themselves in such numbers that the laws are inadequate to crush the evil out, that we should strike at "the root of the tree," and put a stop to it by "*preventing*" procreation amongst them, or, in other words, by *emasculating* them through the assistance of the surgeon.

The suggestion, to say the least, is droll, novel, and rather unique, but, we apprehend, utterly impracticable.

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ANNUAL ADDRESS

Delivered before the California State Medical Society, at Corinthian Hall, San Francisco, April 15th, 1874,

BY T. H. PINKERTON, M. D., PRESIDENT.

Gentlemen of the Medical Society of the State of California:

In accordance with rules and customs of this Society it becomes my duty as President to present to you my Annual Address.

In view of the resolution presented at the last session by Dr. J. F. Morse, and by a vote of the Society laid over until this meeting, I have chosen for my subject at this time the necessity for a higher standard of medical education, with a few suggestions in regard to what might be obtained.

Much has been done the past four years by the members comprising this Society to advance the science and the interest of the medical profession throughout the State.

The reports made by the several Standing Committees have been such as to reflect credit upon their authors; and every part of the State has been represented. To-day we stand as one of the medical organizations of the country whose existence is welcomed and honored by the medical profession of the nation.

California, with her varied climate and means of investigation, can do more to advance the science of medicine and surgery than is vouchsafed to many of her sister States, but to do this it requires the united efforts of our profession throughout the State.

It is a fact well established that the influence and usefulness of every society or body of men depends upon the zeal and harmony existing in and put forth by the said organization.

In order that the educated physician may place himself in his proper attitude before the community we must call for a more thorough medical education. An education such as shall draw the line of distinction between the true physician and the empiric.

It has long since been proven by the futile attempts at legislative interference that but little can be expected from that source alone. Whilst the medical profession is willing to accept into its ranks men who are graduated from some of our medical colleges whose reputation exists in the numbers rather than the quality of their graduates.

It is this class of graduates that keeps the rank and file of the empirical army always full. And they, very naturally, claim to be graduates of the regular school; yet, not being able to comprehend the science of medicine, they are ready to declare the old school system to be a failure. Their only refuge and their only prospects for financial success is to be found in the infinitesimal dose, or in some of the branches of empirical practice; and with the multitude, all who call themselves Doctors are supposed to be able to prescribe for their neighbor.

There is a book published some three hundred years ago which professes to give an account of the notable sayings

and doings of the fools of England, which is a fair illustration of the present time.

The fool of Nottingham being asked by his master what profession or calling had the greatest number within its ranks in that town, replied: "Truly, master, I think there be many more physicians in Nottingham than men of any other pursuit." "A very fool thou art," replied his master; and the fool rejoins, "I will prove what I have said." He was encouraged to do so by the promise of a gold piece. And he went about the town with his face tied up as if he were suffering from a dreadful toothache. Every body he met pitied him, and every body too prescribed for him; and he noted their names and their nostrums, and being seen last by his master and getting his prescription, he submitted his whole list, and his master acknowledged that he had proved his saying.

And can any one of us doubt that a similar investigation would lead to the same results in our own day and in the towns or cities in which we live?

Is there not even reason to believe that the number of those who depend upon regularly educated physicians for counsel and advice is less than in other countries and in other times?

The precocious habits of our country have, of course, been felt in the medical profession.

In most of the schools of Europe, medical honors are not conferred until after a novitiate of four and more frequently five years, during which an extensive circle of sciences is obliged to be mastered and to be approved by a series of strict examinations.

Not only are the essential branches of medicine required to be fully understood, but they must be preceded by a knowledge of the subsidiary science, and must also be confirmed by practical and clinical experience.

With us, on the other hand, the short period of three preparatory years devoted to regular study and lectures may be said to constitute nearly the sum total of a medical education; for the collateral requirements are so small that

their acquisition is often effected during the same three years that are applied to the other branches. And a young man who has learned to read and write, issues from the village school, or perhaps the plough, and in three years receives his diploma, and is declared competent to exercise the multifarious profession of medicine and surgery in all its departments.

As it often happens in this and similar cases, the newly approved candidate sends forth his anxious glance directed, not always to his own deficiencies or the means of supplying them, but to that common goal and object of a young man's inquiry, which is to fill up the measure of his practical aspiration, "an opening." By the fortunate discovery of a settlement in some distant part of the State, or in some promising newly-discovered mining district, he finds himself perhaps at short notice installed, (under virtue of the acquiescent silence of the small community in which he lives,) the constituted physician of the place.

In one month, perhaps in less time, he may be called upon to diagnosticate organic lesion in a case of life and death, or to treat the more formidable convulsive disease. There may be no consulting physician within many miles, at least, none who can arrive in season for the emergency. The safety then and probably the lives of the unfortunate constituents of this young man will depend upon the question whether he has or has not been truly educated, whether his mind and hand have been adequately trained for the great occasions that await him.

It is not enough that he has suffered three years to expire whilst in the office of a city physician; nor that he has passed a corresponding time with some country practitioner. It is not enough that he has carelessly read the works of approved authors and has squeezed through the "too often" mere matter of form examinations. If he has done only this, it is more than probable that failure awaits on himself and disaster upon his patients.

In making the proper investigation regarding the standard of medicine and surgery, it must be obvious to all

inquirers that the subject of medical education, which is of profound interest to the profession in every part of the country, is of special importance in California. We are so far from the older medical schools that it is desirable to build up among ourselves institutions which shall serve the double purpose of training up practitioners of medicine and of affording opportunities to make special researches in the different branches of our science.

A School of Medicine, like every other higher institution of education in our day, must be devoted to the advancement of learning, as well as to its diffusion.

There are in California local and climatic considerations in regard to the development and cure of diseases, which call for the careful and prolonged study of competent specialists. As the State becomes more and more favorably known as a resort for invalids, and earns the name of a *sanitarium*, it becomes necessary that the peculiarities of different geographical regions and their influence upon the healthy and upon the sick should be noted with scientific precision.

While every physician in his own locality becomes something of an authority upon these points, we must look to the schools of medicine for the bringing together of the experience and observations of many different places, and for their discussion in accordance with the established principle of sanitary science. Thus, in a short time, the knowledge of individuals becomes the knowledge of the profession; and positive advancement is secured in the treatment of disease. A State so vast in area, so diversified in physical structure and so peculiar in all its climatic conditions as California, affords a fine field for investigation and discovery.

To our schools of medicine we should also look for the latest and most accurate announcements of medical and surgical progress elsewhere. Very few of those who are absorbed in the laborious duties of a full round of practice can keep themselves acquainted with the rapid advancement of all the specialties of modern surgery and medicine.

But the well-organized school of medicine distributes the various branches of the healing art among many devotees, each of whom may be presumed to have a special fitness for or interested in the special department of which he is the professor. He becomes an authority, not merely because of his own success as a practitioner, but because of his acquaintance with the latest and most approved methods and theories which have been elsewhere suggested.

In short, we may say that in proportion to the ability with which a school of medicine promotes original investigation and accumulates the experience of other States or lands, or in other words, in proportion to its real scientific standing, will be its usefulness and power.

In the training up of students of medicine, the modern progress of higher education has suggested many improvements; some which it is generally thought might be at once engrafted upon our own institutions to the very great advantage of the profession.

The youth of these schools is favorable to some changes which the routine of venerable traditions elsewhere has rendered difficult. Our distance, too, from renowned rivals, gives us freedom to mark out independently the course which seems best. For example, a good preliminary education (to be ascertained either by the exhibition of a college diploma or by the passing of an entrance examination) should be required of every candidate who proposes to pursue the intricate, difficult and all-including science of medicine.

The excellent course of study now given in public high schools and the special advanced instructions which is likewise gratuitously offered in the University of California make it possible for every student of medicine to begin his professional course not only with a good English education, but with accurate knowledge of the principles of natural philosophy, analytical chemistry, comparative anatomy, or zoology and botany.

These scientific foundations are indispensable to professional success. They should be laid before the superstructure

of medical instruction is begun. They should be required as preliminary to the study of medicine. It is also most desirable that there should be a sequence, natural and philosophical, in the order of medical studies, or in other words, that those topics which are general and fundamental should first be thoroughly mastered, and that the specialties of the profession should be reserved to the close of the course.

A classification of the studies, having in view an orderly development of medical science, when once established, would be as advantageous to the youthful aspirant for knowledge as to the experienced teacher.

Finally, the diploma of a school of medicine should bear the imprint of truth; it should be the token to the world that the candidate whose name it bears has faithfully and successfully mastered the elements of his chosen profession. It can never be a prediction of his skill in actual practice; but it should always be indisputable evidence that the scholar who bears it is neither ignorant nor negligent. While it cannot foretell, it should record. It should not have a single signature which has been thoughtlessly written down, for it should be the personal certificate of every professor who signs it and of every examiner who countersigns it, that the candidate whose name it bears has truly mastered the elements of his calling.

From these three considerations, the admission to, the progress in and the closing of a course of medical study, I pass to a brief discussion of two other of almost equal importance.

The time has certainly come when an effort should be made to secure endowments for our medical schools; so that the professors may not be too much absorbed by the daily duties of a practitioner, in order to secure a support, and also in order that there may be no temptation to swell the catalogue of students for the sake of the fee they pay.

Doubtless, with a persistent effort on our own part, as a society of medical men, foundations would sooner or later be secured for a California school of medicine.

The same enthusiasm for learning which has led to the endowment of schools and colleges, the same desire to relieve the woes of sick and suffering humanity, which has built up hospitals and infirmaries, can doubtless be directed to the establishment of schools of medicine, which simultaneously rank among our highest institutions of science and among our noblest charities.

Once more, persistent efforts should be made to secure enlightened legislation on all subjects pertaining to medical education. Doubtless, the extent to which quackery and nostrums are so influential may be attributed in no small degree to the lack of such laws as will secure the lowest-educated physician protection in his calling, and as will compel the ignoramus to refrain from tampering with the laws of life and health.

So long as the laws permit uneducated and incompetent persons to advertise themselves as doctors of medicine, and so long as the newspapers, even the religious newspapers, will publish advertisements of nostrums and panaceas, so cunningly worded and printed, that they have the aspect of editorial endorsement, so long will medical science be checked and humanity be permitted unnecessarily to suffer.

Our remedy seems to be, first, the enforcement of some such act as was proposed at our last meeting by Dr. Oatman and endorsed by this society, but which failed before our Legislature ; secondly, and one equal in importance, the measure so often advocated by the National Association, previously referred to as brought up at our last session by Dr. Morse, providing for an independent Board of Medical Examiners, whose certificate as to the competence of an individual to practice in our profession should entitle him to a diploma from the university, without reference to the school from which he obtained his medical education, and without such diploma no one could legally presume to practice.

The subject, I am happy to say, will be brought before us at this session, and it is to be hoped that it will not fail,

as for twenty-three years past it has done in the National Society, through the misguided efforts of those whose position as teachers in our schools should cause them to labor for the highest standard for medical education.

We have only to look to any part of the State to find medical men of the highest ability who are in every particular qualified as teachers or medical examiners, if required so to act.

The percentage of graduates from the different medical schools in America during the past ten years, who could pass a satisfactory examination before a government military medical board of examiners, is altogether too small for the public good or the credit of the profession. In view of these facts, something should be done to remedy this evil.

Let California unite her efforts with Harvard University in Massachusetts, Belleveu College in New York, the University of Pennsylvania and Jefferson College in Philadelphia, the only institutions of medicine in this country whose diploma is recognized in Europe, and we shall place the standard of medical education in the golden State where the profession will feel honored and the public confidence in the regular school of medicine be fully restored.

PROFESSOR TOLAND'S CLINIC AT THE CITY AND COUNTY HOSPITAL.

Case of Popliteal Aneurism—Operation—Death Four Months Afterward from Rupture of an Abdominal Aneurism—Autopsy—Dissection of Collateral Circulation.

REPORTED BY R. A. MCLEAN, STUDENT MEDICAL DEPARTMENT OF UNIVERSITY OF CALIFORNIA.

Fred. Foss, æt. 46, admitted on or about October 1st, 1873.—The patient complained of pain and inconvenience, resulting from a tumor upon the lower and inner part of the left thigh. He stated that he first noticed the enlargement about a year before, but as it had not given him much

trouble until recently, he did not apply for medical advice. For two months before admission, however, the tumor had increased rapidly in size, causing pain and numbness of the leg and foot.

On examination, the left thigh presented, upon the posterior and internal aspect of the inferior third, a well-marked swelling, extending from the bend of the knee for a distance of eight inches above and spreading out laterally, so as to obliterate the popliteal depression. The tumor was soft and elastic, but firmly fixed. The pulsation, bruit, and thrill were distinctly marked.

Professor Toland pronounced it a case of popliteal aneurism and decided to operate as soon as the patient gained more strength, his general health being poor.

Under a course of tonics, with generous diet, he improved rapidly and Professor Toland decided to operate October 16th.

Chloroform having been administered, an incision was made in the course of the femoral vessels, commencing at a point seven inches below Poupart's ligament and extending upward a distance of three inches. The fascia lata was divided, showing the sartorius resting upon the sheath of the femoral vessels. This muscle was drawn outward and held by an assistant. The sheath was next divided upon a director and the artery separated from the vein. Mott's needle, threaded with a double strand of silk, was passed under the artery, the ligatures freed and the needle withdrawn, leaving two parallel strands under the vessel. The superior strand was pushed up to the junction of the sheath and artery above, and firmly tied with the ordinary square knot. The inferior strand was pushed down and secured, leaving a space of half an inch, in which the artery was denuded of its sheath.

One end of each ligature was cut off, leaving the longer ends dependent from the inferior angle of the wound. The integument was brought together above by two silver sutures, a small tent of wet lint introduced, and the water dressing applied.

To encourage the circulation, the leg was enveloped in cotton and covered with oiled silk.

The pulsation, of course, ceased immediately and the tumor became smaller and harder soon afterward. No dangerous symptom supervened; the leg soon regained its normal temperature; and on the twenty-sixth day after the operation, the ligatures came away. The tumor remained hard for about a month, and then gradually became less firm up to the time of death.

The patient obtained most ease in lying upon the left side, which, by causing pressure upon the sciatic nerve, produced numbness of the leg.

The integument covering the gluteal region became sore and invaded by erysipelatous inflammation. This was promptly subdued by the quinine treatment internally and applications of equal parts of tr. iodine and tr. arnica upon the inflamed tissues.

From the third month after the operation up to the time of death, the patient complained of pain in the left leg, and anodynes were given, with relief.

To the surprise of every one, he died suddenly at 10 o'clock on the morning of February 25th, 1874, four months and nine days after the operation.

The autopsy took place the following morning.

The thoracic viscera were normal, but, on opening the abdomen, it was found filled with blood, which had escaped from a large aneurismal sac, extending from the diaphragm to within a short distance of Poupart's ligament, on the left side.

The spleen, pancreas and the left kidney had been pushed forward and rested upon the anterior surface of the tumor, which was of the sacciform variety, arising from a pedicle, limited above by the diaphragm and below by the upper border of the fourth lumbar vertebra. From this origin the tumor extended downward, in a pouch-like prolongation, nearly as far as Poupart's ligament, on the left side.

The artery, above and below the tumor, showed signs of calcareous degeneration. The tumor was ruptured in

several places upon the anterior and right lateral surfaces. Its walls consisted apparently of condensed areola and white fibrous tissue, forming a very thin sac.

There was slight erosion of the bodies of the second and third lumbar vertebra.

The tumor must have formed principally during his confinement in the hospital, as no symptoms indicative of abdominal aneurism existed at the time of his admission.

The *popliteal* tumor was enucleated and found to weigh, with the contained clot, about eight ounces. In shape it was fusiform and as large as a good-sized orange. It contained a dark, grumous substance, applied in lamella against the inner wall of the sac.

The walls of the sac were one-eighth of an inch thick and uniformly tough and elastic. The obliterated femoral aperture was found at the superior apex; and from the lower extremity the remains of the popliteal could be traced to the place of entrance of an enlarged articular branch.

In order to examine the channels by which the collateral circulation was established, the femoral was exposed by an incision, extending from the site of the tumor to Poupart's ligament. The obliterated vessel could be traced as a fibrous cord up to the place of ligature. Upon section of the lower portion of this cord, the middle and inner coats were found separated by a cylinder of calcareous matter, similar to that in the abdominal aorta. In the upper part of the cord, this space was filled with a clear fluid resembling lymph.

The place of ligature was an inch and a half below the origin of the profunda, and was marked in the usual manner by a constriction. Above this constriction, a cul-de-sac was occupied by the organized fibrinous clot, which extended upward an inch, leaving half an inch between its extremity and the origin of the profunda.

The profunda was as large as the common femoral. Upon tracing it downward, the perforating arteries were found somewhat larger than usual, but the calibre of the

artery was not much lessened until the descending branches were given off. One of these branches formed a trunk as large as a small-sized quill and communicated with the superior internal articular branch of the popliteal. This seems to have been the main channel of the new circulation, but there were evidently many others, as all of the articular branches of the popliteal were much enlarged.

A Case of Convulsive Ergotism, Caused by 30 grains of Ergot.

BY JOSEPH KURTZ, M.D., LOS ANGELES.

Ergot of rye (*secale coruntum*) is certainly acknowledged as one of our best and, in careful hands, even safest expulsive agents in labor, and the majority of practitioners would not hesitate to resort to it in the second stage of parturition, should this be delayed by a want of tonicity of the uterus, provided everything else was normal. That large and oft-repeated doses have an accumulative effect upon the uterine muscular fibres and may even be followed by either convulsive or gangrenous ergotism is well known; but every author recommends it, in suitable cases, in doses of from fifteen grains to half a drachm, to be repeated until about one drachm is given during an hour, if necessary. The case which I am about to relate will show, however, that in some cases even half a drachm may have a deleterious effect. But this is not the only object of bringing this case before the profession; my aim is another. There is no book on obstetrics, diseases of women, therapeutics, general practice, nor even on ophthalmology or medical jurisprudence, that does not say more or less about the poisonous effects of ergot, generally giving perfectly the symptoms, the diagnosis and the prognosis of ergotism. But in vain have I looked over more than a dozen works for any treatment of the disease whatever. This is a point which has certainly been neglected,

according to my opinion, although the disease first induced by ergot consists of convulsive contractions of the uterus and should naturally be treated like convulsions caused by other influences. These are generally treated with chloroform, chloral-hydrat, bleeding, certain depressants, such as veratr. viride, digitalis, tart. emetic and ipecac in refract. doses and finally opiates. Chloroform and chloral-hydrat do relieve the patient of pain as long as their effect lasts, but they do by no means relax those spasmodically contracted muscular fibres of the uterus, as we well know that even under the influence of those agents the uterus discharges it contents. As to bleeding and the depressants, these are certainly not indicated, where the heart's action is not above but even below normal. Consequently there is no other remedy left of the above mentioned than the opium to counteract the effect of the ergot, to which I accordingly in the following case resorted, and, as result shows, with success.

There are probably hundreds of practitioners in this country and others who have never witnessed a case of ergotism and perhaps never dream of it, when they administer their drug, and therefore I should think it most proper for our modern authors to treat of this subject in their works on obstetrics, etc., as well as for our professors in colleges to teach the rising medical generation how to treat a case of ergotism if the young medical doctor should be so unfortunate as to cause it.

Case—February 15th I was called to attend Mrs. F., aged twenty-five years, mother of two children, of whom one had died about two weeks ago. Found her in the first stage of parturition, occipito-anterior presentation, second position, apparently everything normal, the head about being engaged. Her pains were quite good and I expected a speedy delivery. About one and a half hours afterwards, the membranes ruptured, and from that time the pains began to slacken and after half an hour more, they were almost entirely gone. As the patient's pulse was good and she in fair sanitary circumstances, I could not attribute

this to anything else than a want of tonicity of the uterus, and as the child was far enough advanced to be soon delivered, I gave her thirty grains of ergot in two doses, about twenty minutes apart. This soon made its effects felt good expulsive pains came on and half an hour afterwards the child was delivered; but with little relief of the pains; after ten minutes more, the placenta was also delivered and still the pains kept on, as if the patient had the whole process to go through again. The uterus was very much contracted; pulse about 70; temperature normal, except the feet and hands, which were cold; patient complaining of thirst and headache. Now I suspected the action of the ergot playing this mischief, although the dose given was small; gave an enema of tinct. opii gtt. 60, in two ounces of water, but without relief. An hour afterwards, gave her pulv. opii gr. jss. and left her, with the direction to take such a powder every hour until relieved. About six hours afterwards, found her still suffering much and complaining of more headache and a mist before her eyes; pulse 60; temperature, not measured, but below normal; covered with cold perspiration. Ordered some brandy occasionally and ℞ pulv. opii and quinia sulph. aa gr. xvjjj—m., to be divided into xii parts, and gave one every two hours—warm applications.

February 16th—The patient had no rest during the night; her condition, however, seemed a little improved; pulse 64; feet warm; the other symptoms about the same as before; pains not quite as severe nor so constant. She stated she felt an itching over her skin, almost like insects running over her, more in the extremities than other parts, (induced, doubtless, by the opium.—Editor). Continued the powders every three hours and a little brandy occasionally.

February 17th—The patient slept a few hours during the night; the pains are not so severe, but still enough to be very troublesome and very much increased while the child was sucking; pulse 100; body now perfectly warm; skin better. Ordered a dose of ol. ricini and an opiate in the night.

February 18th—Much better; pulse 92; pains easy; no more itching over the skin; I could lay my hand over the uterus without causing any great pain.

From this date the patient improved gradually and made a fair recovery, like the average of women in child-bed.

Before ending this, I shall lead the attention of the reader yet to a few characteristic symptoms in ergotism. The continued pains, almost without any relief; the affection of the skin; the great depression of the heart's action, which was reduced to 60; the reduction of the temperature and the clammy, cold perspiration, while in puerperal convulsions, induced by other causes, we meet with increased pulse and temperature, interrupted or commenced with a chill. The urine was not chemically tested, but it looked reddish and clear, not indicating albumen in any great amount. Furthermore, the quick return of the heart's action and temperature after the spasmodic contraction of the uterus was overcome; this may, however, have partly been due to the stimulant; partly, also, to the secretion of milk (pulse 100).

I have no doubt that this case is nothing new to many practitioners, who may have treated their cases differently and perhaps with still better success, and therefore I would be obliged to them for any further information. Is there no antidote against ergot, such as we have against opium, chloroform, etc., etc.?

Double Congenital Coloboma of the Iris.

BY GEO. H. POWERS, M. D., SAN FRANCISCO.

I was recently consulted by a mother as to the possibility of restoring the pupils of her child's eyes to their natural roundness. The patient was a girl of six and a half years, well nourished and healthy, and its only defect was in the unnatural appearance of its eyes. I found in each eye an appearance as if a downward iridectomy had been very

well performed, and insisted upon the mother telling me when it was done; but she assured me that no operation had ever been attempted, that no oculist had ever been in charge of the case, and that the eyes had presented the same appearance ever since the child was born. Neither father, mother nor other children have any defect of eyes or vision.

I found a very high degree of myopia present, and the ophthalmoscopic examination showed large white patches of choroidal degeneration, with a large posterior staphyloma. Specific taint was denied, and I had no opportunity for investigation, as the case was put into the hands of a person who promised to cause the pupils to become normally round in *about six months.*

Our San Diego Correspondence.

San Diego, Cal., March 15th, 1874.

Dear Lancet:—So far, this winter has not been a success, medically speaking. It has been so extremely healthy and the weather, most of the time, has been so fine, that the "profession" speak of it as an "epidemic of health," that will, if continued much longer, prove ruinous to all who are so unfortunate as to be obliged to depend on the "noble art of medicine" for a livelihood. No epidemic, except the one above mentioned has, as yet, appeared. There was a small-sized scare here in December last over the small pox and Chinese plague furor that exercised your locality about that time. But it did not amount to anything more than a little vaccination, as a "prophylactic," as there were no cases of either disease reported here. A few isolated sporadic cases of scarlet fever have occasionally appeared; but nothing like an epidemic of this fatal disease has, as yet, disturbed the quiet dreams of fond parents or the troubled slumbers of the disciples of Esculapius that vegetate or "liquidate" hereabouts. Measles (*Rubeola*), whooping-cough (*Pertussis*) and everything of this kind, that generally, in the winter and spring,

help to supply the "larder" and the needful amount of "coin" to the "profession," has given us the go-by so far, and from present appearances will continue to do so for a long time to come. Our invoice of Eastern invalids has been, from financial troubles in other parts of the world (we never have any of these troubles here) very small, and those that did come to enjoy our matchless and salubrious climate, were so well supplied with *prescriptions* "from home," that the profession here hardly, if at all, noticed an upward tendency in the monetary barometer that indicates the condition of their bank accounts.

Visitors from the East and other parts have not been anywhere near as numerous as usual this winter, and those that have condescended to pass by that famous (made so by industriously tooting their own "lyre") cure-all, Santa Barbara, and that "sweet" place to die, not live in, Los Angeles, have been, from some metallic influence or other unknown to the writer, very careful not to supply us with any opportunities to increase our reputation as able surgeons or practitioners of medicine.

Still, for all this, the usual amount of coughing is done at the Horton House, from habit, I suppose, and a close observation will enable you to notice *Yung's* tall feathered hearse leaving town about as often as when the "profession" are in full blast and doing a good paying business.

How long this state of things will last depends upon what Congress does for *Tom Scott's* Texas and Pacific Railroad, which, when built, it is said, will have its western terminus here. If Congress does the fair thing and gives *Tom Scott* what he wants, why, practice will be good, if not "*nihil*," as usual.

As soon as we hear from Congress I will write you again.

Au revoir, DIEGO.

AN enthusiastic admirer of nature says "now is the time to read the book of nature, while autumn is turning the leaves."

Surgery.

Neurotomy.

BY S. WEIR MITCHELL, M.D.

The state of medical opinion as to the results of nerve-sections has undergone some strange reversals from time to time, until of late, owing chiefly to imperfect observation on the part of certain eminent surgeons, we are told that a large nerve can reunite within a few days after having been divided and can thus early reassume its lost functions. Upon this point, as has often happened, the physiologists and clinicians were on opposite sides. Nerve-sections in the laboratory, even in young animals, gave no such result as the presence of feeling a few hours after the division of a nerve. It is most interesting to observe what occasioned this conflict of opinion and to see how both sides were somewhat astray and how the truth—a most useful and practical one—has at last come out of it.

In 1864, the usual physiological belief was that a nerve having been cut, some definite region to which it was distributed would lose all sense of feeling and that certain muscles would act no longer until after many months, when, in fortunate cases, the nerve ends reunited and the sensory and motor functions became partially or fully restored. In the same year, 1864, Laugier brought the ends of a cut nerve together by suture and saw that the parts involved had some feeling and motion *the very same day*. As strange results were obtained by Nélaton and Paget. But soon after Verneuil pointed out that in cases where no reunion could have taken place, where, in fact, a post-mortem section showed absence of union, motion had been seen and sensation noted in the parts concerned ; so that some of the cases proved too much. In 1867, Letiévant, after dividing the median nerve in man, satisfied himself that both feeling and motion remained, where, according to the ordinary notions, none should have been found. A careful study, however, showed that each muscle fed by the cut nerve was really palsied and that the motions seen were due to muscles supplied with nerve force by the ulnar and radial. As to this there can be no doubt ; and my own study of a recent case has on this point satisfied me thoroughly. The seeming presence of feeling was more of a puzzle. It was

found that feeling was vastly lessened in the median area, but not lost, except in a very limited space. Now, this state of things existed within a few hours after the section, when not even the wildest believer in regeneration of nerve could dream it had already taken place. The explanation in this especial case lies in the existence of branches from the ulnar which enter the median nerve below the point of section, and also in the intimate plexus it forms with other nerves at the finger-ends. The anatomists are, in part, responsible for the clinical difficulty. Take, for instance, Flower's Atlas, or most of the anatomies, and you will see that the median innervates this area and the ulnar that, and so on, while in truth this whole surface anatomy is a fiction and has to be studied anew by closer dissections and by utilizing such nerve-sections as are made in man. In fact, I believe it will be found that the regions of skin made sensitive by but one nerve-branch are very limited, and that throughout the whole surface, and not merely at the extremities, division of several nerve-stems will be needed to extinguish feeling of all forms in any one part of the skin. Strange, then, as it may seem, there is yet room for a careful monograph on the anastomoses of the main nerves. As regards the hand, some of these are pointed out in certain anatomies and not in others. In Hilton on "Rest and Pain," there are interesting facts in this direction and so, also, in Hirschfeld; while Letiévant has described at least one hitherto unnoticed anastomatic branch between the ulnar and the median. Yet later, Arloing and Tripier have shown that in cats and dogs these communications are so complete that to annihilate feeling in any one part of the paw all its nerves must be cut.

I was amazed of late to see how difficult it is in man utterly to destroy feeling in the arm. In a notable case, Dr. Maury divided the whole brachial plexus in the neck. At first the posterior and inner cords were cut and the patient was allowed to become free of the effects of ether. To my surprise, he still had touch sense in the palm and dorsal surface of the hand, forearm and arm and on the inner face of the arm. The inner face of the forearm I think I did not examine. As to the rest, I am positive that partial feeling remained until, the external cord being divided, the whole sensibility was lost save at the upper part of the arm, where there was, and still is, some tactile sense, due, I presume, to filaments given off from the plexus above the point of section. I do not dwell on the case, as it will be more fully related at another time. It

went far towards justifying the extreme opinion I have mentioned as that likely to become a future medical belief. I had certainly believed, with others, that in the brachial plexus the interchange of fibres was notable, but I had not supposed it to be so perfect. M. Letiévant* and I myself have pointed out some of the fallacies which arise from want of care in studying the true areas of lost feeling; but it is needless to dwell further on this.

I may add that his views as to surface anatomy of nerves are well illustrated by cases of my own, and that the lapping over, so to speak, of nerve territories is to be seen in the face as well as in the extremities. Careful study of his facts and of my own, which I am about to publish, has shown that the nerve distribution in the hand is subject to certain variations, so that sometimes the median, for example, innervates the palmar surface of the thumb, the index and half of the second finger, sometimes extends over the whole face of the latter, and very often reaches the line given in Flower's plates, which carry it up to the middle of the face of the third finger. Also, in my case it gives scarcely any surface feeling to the palm, while in Letiévant's it largely supplies the palm on one side, according to the commonly received anatomy. Its section also greatly damages feeling on the dorsal aspect of the thumb, the index and second finger, but the area affected is not the same in his cases and in mine. Like variety exists as to the ulnar distributions, and, as I shall show in future, the radial nerve has been cut and has left, in one case, so large a degree of feeling on the dorsal face of the hand that neither the patient nor the physician could perceive that there was any loss at all.

It is to be hoped that a few years will give us a large number of careful maps of the regions in which feeling is lost after nerve-sections. If they are made by observers as careful as Letiévant, we shall have, by-and-by, a new and reliable surface anatomy. It is greatly needed. Nor do we require to know alone the ordinary distributions; we desire also to have sketches of the variations which seems to be frequent, for while as yet nerve supply to muscles seems to be definite and constant, that to the skin-spaces appears to vary strangely and frequently.

I have said that there was practical value in this knowledge, as thus: a year ago, if a surgeon had been asked to cut a nerve to relieve a local injury on the extremity of the

*Traité des Sections Nerveuses, Paris, 1873.

dorsum of the index-finger, he would, without doubt, have cut the radial; and yet, as we now know, the median may have been equally or more to blame. Doubts of like nature would arise if the cause to be quarantined by nerve-section lay in the third finger, because sometimes that part is fed by the median, sometimes by the ulnar, at times by both. In these facts lies, as I believe, the true blame for many of the failures to relieve by nerve-sections epilepsy or tetanus when these are due to an eccentric cause. The knowledge I am seeking becomes, from this point of view, of inestimable value.

I have asked myself again and again how it is possible to know just where a given nerve is distributed—whether it chances to be normal or one of those cases ef variety which occur so often that we may well call them normal variations. There are, I think, three ways. If we freeze the ulnar, it is not difficult, as a rule, to determine by the lost feeling its area of distribution. The process is very painful, as I know to my cost. Pressure may also be used and is more generally applicable. We can compress any of the arm nerves until they loose power to transmit impressions and then the area of lost feeling may be studied. This also is not a painless process and it is not always or everywhere of easy application. In my own case I can easily trace out the distributions by passing a faradic or galvanic current through two or three inches of the nerve to be studied. I think the plan will usually answer. It gives very clear replies. Thus, a current of moderate intensity is felt only in the usual ulnar region, *i. e.*, up to the middle of the third finger, but most sharply in the ulnar palm and the little finger; made more severe, it is felt also in the third finger and even beyond it; but a mild current, surely placed in the ulnar or the median, gives clearly a sense of vibratory tingling in certain spaces. As to the interpretation of very severe currents I am not so sure; they seem to affect nearly all of the hand; but as to this I shall probably have more to say in future.

M. Letiévant discusses in his excellent treatise the question of neurotomy for cancer, ulcers, tetanus, neuralgia and epilepsy, but says no word as to its use in local spasm, as blepharo-spasm, in which I have seen brilliant successes and as remarkable failures. As regards neuralgia, I have had to counsel in favor of neurotomy where the pain had a traumatic cause, but in what I may fairly call a vast experience I have never been driven to cut a nerve for common neuralgias. Anstie does not even discuss the

question; and it is to be remembered that galvanism has succeeded after neural section has failed. Yet I should not hesitate to use it, because I believe that even when the cause is of known centric origin there may be good reasons why neurotomy may cure. Indeed, we ought not to fail to remember that galvanism is a peripheral application and does win successes, even where the malady is surely centric.

As regards the influence of nerve-section on the thermal conditions of a limb, the clinical observers tell us that there is always a fall of temperature, while the physiologists say there is a rise of the thermometer; but the latter observers experimented immediately after section, the others, as a rule, only after weeks or months, so that I felt free to predict that when the clinician would put himself into the same position as the physiologist, nature would make him the same answer; and this is just what my own cases have lately taught me. First, the temperature rises and then, after a time, it falls. These constant conflicts of opinion always end in this fashion. Somewhere there has been a defect of observation, or else the standpoint whence the facts were seen has been different, and so the facts have been made to seem to vary. The case of neurotomy of the brachial plexus by Sands and Sequin* is, I suspect, the first example of this operation. It is admirably related, with scarcely any defects, which cannot be said of the European cases of neural section. In fact, as I have said, the horrible confusion as to the results of neurotomy, which has so long embarrassed us, is due to observations so clumsy and imperfect that they cannot be too severely criticised.—*Philadelphia Medical Times.*

Fatal Retention of Urine, Produced by a Fibroid Growth, in a Young Child.

BY HENRY SMITH, F. R. C. S.

On Friday, November 28th, my attention was called by Mr. Delatour, our junior house-surgeon, to a child, nineteen months old, who had retention of urine. On examination, I found that the bladder was greatly distended, but that the child did not appear to suffer pain. The history of the case was, that on the previous Wednesday, the mother,

*A Case of Traumatic Brachial Neuralgia. New York, January, 1873.

finding the child could not pass water, took it to a medical man, who vainly attempted to draw off the water. On the following day, she took it to the hospital, and Mr. Delatour, ascertaining that there was a very tight phimosis, very properly divided the prepuce, but the retention did not give way, and he then very carefully attempted to introduce a catheter, but failed.

I attempted to pass a No. 3 silver catheter into the bladder, both without and with chloroform, but I was utterly foiled, and I could clearly feel the point of the instrument travelling along on the left side of the urethra. The rectum appeared to be preternaturally dilated, and there was a perceptible hardness between this and the bladder, which I could not make out. I thought possibly that it might be some blood effused from the previous attempts at the catheterism, or that possibly there might be a stone sticking at the neck of the bladder.

The child was admitted into the hospital, and, as a further attempt at passing a catheter failed, I requested Mr. Bell, assistant-surgeon to the hospital, to relieve the distended bladder by the aspirator. This was done and twice repeated, but the child gradually sank four days after admission.

On making a post-mortem examination, we at once discovered the cause of the retention and our difficulty, for there was a large, irregular, fibrous growth interposed between the rectum and the bladder. It apparently sprang from the periosteum of the pubis and ischium, extending under the arch of the former backwards and forwards, thrusting the urethra out of its position against the left ischium. So extensive was the growth, that there was a solid mass two inches wide, situated between the rectum and posterior part of the urethra. On microscopic examination, the appearances presented were those of a fibroid or recurrent growth.

I have not met with a case similar to this, either as regards the situation of the disease or the particular results which were produced. It is well known that in children we occasionally meet with growths, either fibrous or fibrocystic, in various parts of the body, and which are probably congential. In this instance the growth may have been one of this kind. Whether, however, it were congential or not, the locality was peculiar; and we have here presented to us an illustration of a morbid condition not hitherto associated in the mind of the surgeon with the causation of retention of urine in the child.—*Lancet.*—*Canada Lancet.*

Operation by the Elastic Thread.

The British Medical Journal says that on the 21st of November Sir Henry Thompson demonstrated, for the first time in England, a surgical procedure which has been practised for some time past by Prof. Dittel, of Vienna. Some time ago Prof. Dittel discovered by accident the power of an elastic thread in dividing tissues, and at once began to reduce the idea to practice. He first applied it to a case of nævus of the scalp of a child; then finding that the plan quite answered his expectations, he applied it to the removal of the testicle, penis, etc., and finally to the amputation of limbs. It is not understood, however, that he proposes to employ the method in the case of the larger amputations.

The time required for the completion of an operation varies according to the amount and density of the tissues which have to be divided, *e.g.*, for the separation of the mamma from eight to twelve days are required.

Among the operations for which it is admirably adapted may be especially mentioned *fistula in ano*. One end of the India-rubber thread is passed, in the eye of a probe, up the sinus into the bowel, then caught, brought out at the anus, and tied; it cuts out in a few days.

The patient on whom Sir Henry Thompson operated was a stout, middle-aged woman, who was suffering from an ulcerating fibro-cystic tumor (cystic sarcoma) of the right breast. She had a lump in the breast for twenty years, but it caused her little inconvenience till two years ago, when it began to enlarge rapidly, and finally the skin over it gave way. At the time of the operation the tumor was of the size of a large orange, and somewhat pendulous, the breast itself being wasted; it was crowned by a large, sloughy, fungoid ulcer. The ligature used was tubular, about one-twelfth of an inch in diameter, the calibre of the tube being about one-third of this. A large nævus needle was threaded with this and a piece of twine, and passed under the base of the tumor. The elastic was then cut, the needle withdrawn, and the halves of the pedicle tied separately. The twine was passed with the rubber-tube, in order that a second tube might be introduced in case the first should break. The patient complained of pain, apparently not very severe, for about twenty minutes after she recovered from the chloroform. Dr. Dittel's paper in the *Allg. Wiener Med. Zeitung*, 1873, contains very full details of the method.—*New York Medical Record.*

A Rare Physiological Experiment.

Dr. Brandt, Professor of Surgery in Klausenburg, has placed on record, in the *Wiener Medizinische Wochenschrift*, a case in which removal of the sound kidney took place in the human subject. A healthy man, aged 25, was stabbed in the left hypochondrium. Hemorrhage to the amount of three or four ounces followed; and about three hours after the accident, a fleshy-looking tumor was expelled through the wound by a fit of coughing, attended with severe pain. It was replaced by a bystander, but was soon again driven out by the cough, On his admission into hospital, twenty-four hours after the injury, Dr. Brandt, after a careful examination of the protrusion (of which a careful description is given), arrived at the conclusion that it was the left kidney. Its surface, with the ureter, was torn in some parts, and allowed the escape of a fluid, at first yellowish and transparent, but afterwards sometimes reddish and sometimes turbid yellow. It had an alkaline reaction, a specific gravity of 1042 to 1052, containing a large quantity of albumen and mucin, with some hæmo-globin, traces of urea, and an abundance of alkalies and alkaline earths. It gave a sediment, which on microscopic examination was found to consist of pus and blood-corpuscles, masses of nuclei, mucus-fibrils and fibrinous clots; also epithelium of the kind belonging to the calyces and pelvis of the kidneys. Dr. Brandt arrived at the conclusion that the organ was rendered useless, that its retention endangered life, and that it would be best to remove it. The previous history of the patient did not contra-indicate this; he had had no severe illness, and, though the urine in the bladder contained some albumen, this might be derived from the injured organ. Accordingly, on the fourth day of the injury—a photograph of the patient having been first taken—Dr. Brandt tied the pedicle of the tumor in two parts, by means of a ligature passed through the middle, and cut it away with a knife. This operation was done on June 7th and on the 23d the patient left the hospital convalescent. No symptoms of uræmia or of peritonitis occurred during the progress of the case. The urine was throughout acid, of specific gravity of 1,010 to 1,040, and of normal composition; at first it was of a reddish-yellow color, but afterwards became clear yellow. Dr. Brandt has seen the man several times since the operation. He has no signs of disease of the heart, but complains of a sense of oppression and fatigue, especially in going up-stairs, and says he

cannot work as well as before. Dr. Brandt, however, suspects that he may say this to avoid military service.—*British Medical Journal.—Canada Lancet.*

A New Operation for Cleft Palate.

On the 22d of November, Sir William Fergusson (*The Lancet*, November 29), in operating on two patients for the closure of the opening in the hard palate after the cleft in the soft palate had been closed, adopted a modification of a procedure which is intended to increase the chances of success of the operation. Sir William remarked that in the so-called Langenbeck operation—that is, where muco-periosteal flaps are taken from the roof of the mouth and drawn towards the middle line—the proceeding is often unsuccessful, from the fact that after some time the granulations that are thrown out on the upper surfaces of the displaced flaps contract and separate the union that may have taken place between the pared edges of the flaps. It is true, he observed, that some assert that bony matter is deposited on the upper surface, and that this diminishes the size of the aperture in the osseous palate. But, in demurring to this, Sir William said he thought it was hardly possible to strip off healthy periosteum from the subjacent bone. He proposed therefore, instead, that in addition to making the ordinary incisions for the flaps, the hard palate should be split on each side of the opening with some sharp cutting instrument, and that the two pieces of bone should be pressed towards the middle line, and the pared edges of the soft tissues then be brought together; by this means the central opening would be closed, but two lateral apertures would be formed. But inasmuch as the two lateral openings would be but half the size of the original central one, and as there would be more likelihood of the fractured edges of bone throwing out osseous material for its repair, it was hoped that the prospect of a successful issue would be greatly enhanced.—*New York Medical Record.*

THERE is as much difference between good poetry and fine verses as between the smell of a flower garden and of a perfumer's shop.—*Hare.*

Institutes and Practice of Medicine.

On the Importance and Danger of Rest in Pulmonary Consumption.

An interesting paper on this subject, by Dr. Berkart, has drawn from Dr. Horace Dobell a communication on this topic, which appears in *The British Medical Journal* of November 22d. He says: "The rules for the cautious application of localized rest in lung-diseases which I recommended, as dictated by a consideration of the nature of tuberculosis, and justified by the results of my own practice, are as follows:

1. If one lung, or a portion of one lung, or a portion of each lung, has become diseased, under circumstances which make it certain that there is no constitutional cause of lung-disease, then it is safe to secure localized rest for the diseased part, and to throw the extra work upon the sound parts; but even then it is necessary to be cautious that the extent of the lung so rested is not too large in proportion to the extent of sound lung upon which the extra work is thrown. If there is any question about this, rest of the whole body must be secured in addition to the localized rest of lung, so as to save the sound lung from as much work as possible.

2. If there is a constitutional cause of lung-disease, but only a small area of lung at present suffering, and that in the upper lobes, while there is a capacious chest with large areas of lung in the lower portions quite sound and insufficiently used, then it is safe to secure localized rest for both upper lobes, and to make the lower portions do a fairer proportion of the work; but even under these circumstances the respirations should be kept at as low a point as practicable.

3. If a portion of lung has become disintegrated, under the influence of constitutional causes, and remains obstinately unhealed after all constitutional symptoms have been arrested, and, for some time past, no other portions of lung have shown a tendency to yield, then I think it is quite safe to secure localized rest for the disintegrated portion, so as to give it a fairer chance for healing; while an amount of air and exercise may be allowed to the patient, for the purpose of improving his reparative powers, which could not have been permitted while the damaged lung was exposed to the same amount of action as the sound parts. But even

here the utmost caution is required not to carry the exercise beyond a very limited amount.

4. If the constitutional tendency to lung-disease—the abnormal physiological state—is strong, and signs of impending mischief in the lungs are scattered, no localized rest should be attempted, but every means should be brought to bear upon the important object of maintaining respiration at its lowest point consistent with life and nutrition, until the constitutional tendency has become passive and the local symptoms have been removed.

In conclusion, to prevent misapprehension on so vital a point, let me remind my readers that, in urging "the importance of rest in consumption," I am referring to cases in which the lungs are already damaged, or in which the constitutional disease has declared itself in sufficient force to render tuberculization imminent. If the symptoms are only what are commonly called premonitory, that is, if they are those of commencing tuberculosis, and no reason or sign is discoverable which justifies the suspicion that tuberculization has commenced; if a sufficiency of fat remains without calling upon the albumenoid tissues, the principles of treatment are quite opposite to those detailed."—*New York Medical Record.*

Hyperemia of the Thyroid Gland in Children.

Dr. A. Corre contributes the following article on the above subject to the *Journal de Medecine et de Chirurgie* for November, 1873:

"Some time ago I was hurriedly called to a boy three years of age, fair, lymphatic, but of fine appearance, whom I had attended some days previously for obscure cerebral troubles, for which I had given him small doses of bromide of potassium. The child breathed with difficulty, his voice was weak and as if muffled; his neck, sensibly rigid, was thrown backwards. On the sides of the larynx one perceived a vague thickening occupying the carotid region in the part corresponding to the lobes of the thyroid body. Nothing else in the throat; auscultation only showed a slight weakening of the respiratory murmur without cough or any kind of rale: there was slight feverishness.

These symptoms came on suddenly in the middle of the day; under the influence of a painting with tincture of

iodine and a poultice, they disappeared gradually in a few hours. From this time also the cerebral troubles to which I have referred (agitation, nocturnal delirium) have not reappeared.

On another occasion I had the opportunity of observing a similar occurrence in a boy of the same age. The accession was produced towards nine o'clock in the morning with a train of identical symptoms, and in full health. These accidents equally yielded rapidly to the topical employment of tincture of iodine.

To what part of the nosological system do these cases of which I have sketched the leading features belong?

Proceeding by way of elimination I have set aside the idea of sudden croup and of false croup. Had I to do with an adenitis? I could hardly believe that, as the tumefaction disappeared so rapidly; besides this tumefaction by its seat and by the ill-defined thickening which accompanied it, from that which is produced by swelling of the cervico-bronchial glands. It seemed to me more rational to admit here a sudden fluxion of the thyroid body, even though one can explain only with difficulty by this hypothesis the circumstance of the throwing back of the neck; but in reality this throwing back may well be simply the result of the instinctive effort which sick children make in order to bear the pain.

For the rest I have communicated my two observations to M. Bouchut; this competent clinician has hesitated to pronounce as to their nature. He tells me that he has met with many cases having some analogy with mine, but in all he found either a prevertebral tumor (fatal cases) or an adenitis (cases susceptible of a cure at the end of a few weeks.) The idea of a thyroid hyperemia appeared to him quite tenable. The obscurity which, as one sees, reigns still in this point of pathology calls for fresh study, and it is in the hope of eliciting it that I have published this note."—*Obstetrical Journal Great Britain and Ireland.*

Oxygenating Remedies.

Under this name are embraced several remedies, which, when introduced into the blood, lead by their decomposition to a liberation of oxygen. They are best known in this country, in England and in Belgium; and in the latter Dr. Van den Corput has made a number of experiments

to show their efficacy and demonstrate that the alkaline hyperchlorites are to be preferred to the chlorate of potash, recommended by Dr. Smith. Lately Dr. Richardson, of London, has introduced into practical medicine the use, for this purpose, of peroxide of hydrogen, the dose of which is from a half drachm to a drachm daily. These remedies are indicated in two classes of affections, viz.: those in which respiration is imperfectly carried on and those which depend upon incomplete nutrition. They render valuable service in asthma, pneumonia, croup, certain heart affections, and are none the less valuable in stimulating the forces which govern nutrition, oxygen being one of the best of tonics.

Dr. Van den Corput has had considerable experience in the administration of a mixture of hyperchlorite of soda with cod-liver oil. The latter is administered as an aliment, but when given pure is frequently attended with bad results. When there is a deficiency of oxygen in the blood, owing to pulmonary lesions, it becomes very often injurious to increase the carboniferous elements of the blood without associating with them elements capable of furnishing the oxygen for their combustion.

Dr. Foster, of Dublin, has, on his part, published two cases of occlusion of the foramen of Botal, in which he has been able to show, in the most evident manner, the influence of chlorate of potash and peroxide of hydrogen upon the phenomenon of hæmatosis. In these two infants the cyanosis was accompanied with evident lowering of temperature, especially in the extremities. Chlorate of potash, in doses of fifteen to twenty centigrammes, caused a diminution in the degree of cyanosis and an elevation of five to six degrees in the temperature of the fingers. The peroxide of hydrogen, however, produced results even more marvellous, causing the cyanosis to nearly disappear and raising the temperature of the feet and hands to quite the normal degree. This improvement, in order to be maintained, required the continuous use of the remedy.—*Jour. de Med. de Bruxelles* and *Lyon Med.*—*Medical Record.*—*Canada Lancet.*

REVIEWERS are always telling authors they do not understand them. The author might often reply: *Is it my fault?*—*Hare.*

Diseases of Children.

Dr. F. P. Foster submitted to the New York Academy of Medicine the following propositions with regard to animal vaccination :

1st. Vaccination of the human subject with animal vaccination is attended with a degree of success as regards the protection of vaccination equal to that obtained by any other method.

In regard to this point, Dr. Foster stated as the result of three years' experience in connection with the vaccine department of the New York Dispensary, that from accurate reports of 78,176 cases in Boston, Baltimore and Buffalo, it was evident that in all cases the success was equal to any which had been obtained when humanized lymph had been employed, whether the vaccination had been primary or secondary.

2d. The vaccine produced by animal vaccination is genuine and is as thoroughly protective against smallpox as the protection obtained by the use of any other form of vaccination.

3d. The use of animal vaccine does not entail the dangers of severe local inflammatory affections or general febrile complications, generally attributed to it by some authors.

4th. Animal vaccine to the same extent as humanized vaccine is capable of preservation for a considerable length of time for transmission to remote parts.

5th. The use of animal vaccine eliminates one of the suspected elements in the causation of syphilis and helps to silence the anti-vaccine agitators.

6th. Animal vaccine is the most trustworthy safeguard for the supply of material in emergencies.—*New York Medical Record*, January 15th, 1874.

TO INCREASE THE GROWTH OF BONES.—M. Ollier read a paper recently on this subject, supporting his statements by experiments and clinical observations. He finds that where there has been an arrest of growth of the long bones, impeding progression or producing deformity, he can induce growth by producing a superficial exfoliation of bone by means of caustics.—*The Medical Record.*

Gynecology and Diseases of Children.

The Influence of Malpositions of the Uterus upon Sterility.

BY DR. HERMANN BEIGEL.*

The author commences by referring to Marion Sim's proposition that conception must follow in every case in which it is possible for the spermatoza to enter the uterine canal, and come in contact with a healthy ovum: the sole condition required for this being that both the man and woman should be in sound health. To illustrate the frequency of sterility, he refers to the statistics of Matthews Duncan, who found that 15 per cent. of all married women, between the ages of 15 and 44, were sterile. Dr. West reckoned that 1 in 8.5 were sterile; other authors have placed it as 1 in 10.

The genital organs, extending from the vulva to the abdominal openings of the Fallopian tubes and the ovary, may be divided into two parts, one of which, consisting of the external genitals, the vagina, cervix and uterus, is accessible to direct examination by the speculum and the sound; the other is quite shut out from such an examination. Each of the organs contained in these two parts may be so affected as to offer an impediment, so that on the one hand it may be impossible for the spermatoza to enter the cavity of the uterus or the tubes, and, on the other, the ovum may be prevented advancing far enough to come in contact with the impregnating fluid. One of the most frequent causes of sterility is alteration of the position of the uterus. Marion Sims found that in 250 married women who had never borne children, 103 suffered from anteflexion and 63 from retroflexion: of 255 who had borne children, but had ceased to bear before the usual time, 61 suffered from anteflexion and 111 from retroflexion, so that from this two-thirds of all sterile women were suffering from some form of uterine malposition. G. Hewitt found that in 296 cases of flexion and version of the uterus, 235 were in married women, and of these 81 were sterile in the sense that they had had no children, or only premature labors; of the 81, 57 were absolutely sterile and 24 had aborted. The author examined 125 sterile women, and in 114 it was not difficult to assign the cause of the

* "Ueber den Einfluss der Lagerveränderungen der Gebarmutter auf die Sterilitat," von Dr. Hermann Beigel.

sterility: 34 had some form of malposition of the uterus, 26 versions, 12 flexions, and 2 prolapsus. A deviation of the uterus from its normal position, whether flexion or version, does not in itself cause any impediment to conception, yet such a malposition may render it difficult since it prevents the onward movements of the spermatoza: this impediment is not, however, necessarily one which cannot be overcome; but it is otherwise, when, as is not seldom met with in flexion, the anterior lip of the os is longer than the posterior, and is so firmly fixed against the posterior wall of the vagina as more or less closely to block up the passage, and thus form a barrier to the advance of any foreign body. Therefore we must not so much consider the degree of the version as the determining cause of the sterility as the relation of the lip of the os to the anterior or posterior wall of the vagina, according as we have to do with retro- or ante-version. Also a pronounced bend in the uterus does not *per se* necessitate sterility, for the canal of the uterus may still be permeable; but sterility follows when the flexion is such that the two walls of the cervix or of the uterus are in contact so that the canal is quite closed. It is in such cases as these that sterility persists as long as the position of the uterus is such as to close the canal. The author therefore considers that the only rational treatment is to replace the uterus in its normal position. For this purpose he has used with advantage an intra-uterine pessary of the following form: it consists of an india-rubber ball, to which a perforated uterine stem is fixed. It is introduced by passing the sound through the tube and the india-rubber ball. After it is in position the india-rubber ball is blown up to the proper size, and the tube form is fixed to a girdle.—*Obstetrical Journal of Great Britain and Ireland.*

Complete Occlusion of the Os Uteri Complicating Labor.

Dr. S. S. Todd relates the following history:—

Mrs. C——, aged thirty-six years, consulted me in regard to what she believed to be a menstrual flow that had continued uninterruptedly for the last two months, together with other minor ailments. A vaginal examination revealed the presence in the cervical canal of a small polypus, about the size and shape of an almond. This was removed with the forceps, and, as a slight hemorrhage

followed, Monsel's solution was applied to the cervical canal. No exploration of the uterine cavity was made, and not a suspicion entertained that the woman was pregnant, having been married nineteen years without ever conceiving, so far as she knew. Such, however, must have been the case at the time of the operation, as the sequel shows. Soon after, she began to suspect that she was pregnant, and upon examination I was able to assure her that her suspicions were well founded.

Nearly seven months after the removal of the polypus, that is to say October 10th, I delivered her of a living, healthy and apparently mature child; so that it is probable that the hemorrhage commenced about the time of conception, and that she was about two and a half months advanced in gestation, when the operation was performed. On the morning of the 10th, at 6 o'clock, labor-pains came on, increasing in force and frequency up to the time when I first saw her, three hours after. At this time the uterus could not be reached, but nothing abnormal was suspected. A vertex presentation was recognized. At 1 o'clock P. M. I found the condition unchanged, excepting that the head had descended lower into the pelvis. I saw her again at 7 o'clock. The patient was a stout, muscular woman, and the duration and force of the pains, which had not relaxed during the entire day, still continued. An exploration now showed that the head, carrying the lower portion of the uterus before it, had nearly reached the floor of the pelvis; that the uterine wall was greatly thinned, and that as yet the mouth of the womb could not be found. Two hours passed, during which time fruitless endeavors were made to drag the cervix into the pelvic axis, or in some way to discover the nature of the complication. The uterine wall seemed as thin as paper, the unequal surface of the fœtal cranium being clearly discernible with the finger through the attenuated intervening structures. It was apparent that if the old opening was not found nature would soon make a new one. The finger was again carefully passed over the surface of the dense globular tumor in search of a point representing the os, when, at its most projecting point, and in the central axis of the strait, it encountered a slightly roughened point, only partly encircled by an elevated rim, and feeling like a thread under the finger. There was no depression, and the texture of the tissue appeared identical with that on the outside of the narrow rim, except that it was a little roughened.

I was now convinced of that which I had before only half suspected was indeed true, viz.: that this roughened

point corresponded in site to the original opening, and that the threadlike elevation which half bounded it was all that remained of the lips of the os tincæ, the cervix being completely flattened against the fœtal head. The danger of further delay, now that the case was understood, was manifest, and as I had no instruments at hand (a gum lancet would have been very acceptable), I scratched an opening with my finger nail, enlarging it till I could distinctly feel the hairy scalp. A very small quantity of the liquor amnii escaped—I had perforated both the cicatricial tissue and the membranes. It was now 10 o'clock P. M. The aperture thus made was rapidly widened with the fingers, and at haf-past 11 the child, of medium size, was delivered. The woman made a rapid and satisfactory recovery.—*Kansas City Medical Journal*, January, 1874.

A Case of Acardia.

Prof. Wm. T. Lusk, M. D., reports a case of acardia. The patient, a primipara, had already given birth to a male child, but the abdomen had not diminished greatly in size. The second child presented by the breech, as was supposed, and version attempted, which was impossible, but the delivery was finally accomplished unaided, and the monstrosity was readily recognized as an acardia. The weight was three pounds and nine ounces. There were but two toes on the right foot. On the left foot there were two toes completely formed, and a small appendix composed of skin, which was evidently the rudiment of a third toe. Scrotum and penis were well developed. A loop of intestine protruded through the umbilicus. The upper portion of the fetus consisted of two globular sacs composed of skin, through which a distinct fluctuation could be made out. There was a small bunch of hair just at the upper junction of the sacs. Upon opening the tumor it was found to be filled with gelatinous matter, partly free and partly contained in cysts. In the anterior portions were situated the vestiges of the trunk. The cervical, dorsal and lumbar vertebræ and ribs were complete. There was a pyramidal bit of bone loosely connected with the upper cervical dorsal vertebræ which constituted the sole representative of the skull. As usual, there was complete absence of the sternum. The kidneys

were well developed; the right kidney, owing to the absence of the liver, was situated somewhat higher than the left. The ureters were both present, and opened into a small-sized bladder. Two bodies, supposed to be the testicles, were found near the internal abdominal ring. There were no traces to be found of either heart, lungs, stomach, pancreas, liver or spleen. The communication between the two umbilical veins was situated just at the insertion of the two cords into the placenta. A thrombus had formed in the communicating branch, which nearly closed the umbilical vein coming from the acardia, while the circulation in the umbilical vein of the well-formed child was undisturbed. A communication between the umbilical arteries was not detected.

The accepted theory of the origin of this monstrosity may be briefly stated as follows: The acardia is always one of twins. Both children are developed from the same ovum, are of the same sex, and are contained in a single chorion. Each fœtus has, however, usually its own amnion. There is a single placenta, but two capillary systems which communicate. Sometimes it happens that, by means of large communicating vessels the two fœtal circulations in the placenta form a more intimate union with one another. Then, in case each fœtal heart beats with equal intensity, the result would be an arrest of the circulation in the communicating branches with formation of thrombi. When the heart's action in one fetus more than counterbalances that of the other, the stronger blood-current in the placenta would push back the weaker one, at first impeding the circulation of the less favored fetus, then arresting it, and finally causing it to take an inverse direction. The heart then atrophies. The acardia becomes then simply an appendage to the healthy fetus, the circulation going on as follows: venous blood of the healthy fetus is conveyed by the umbilical arteries to the placenta; the force of the healthy fœtus' heart then carries it through the communicating branches to the umbilical arteries of the less favored twin; this force is insufficient, however, to carry the current to the upper parts of the body, which therefore are not developed. The favorable position of the lower extremities for receiving the blood from the umbilical and pelvic organs explains their further though imperfect growth and development. The blood carried to the fœtus by the umbilical arteries is returned by the umbilical vein. The mother made a good recovery.—*N. Y. Medical Journal*, February, 1874.

The Anticipation and Treatment of Post-Partum Hemorrhage.

ABSTRACT FROM A PAPER BY PROFESSOR BASSETT.

Dr. John Bassett, Professor of Midwifery in the Queen's College, Birmingham, in a paper read before the monthly meeting of the Birmingham and Midland Counties Branch, on November 13th, advocates strongly the preventive treatment of uterine hemorrhage. He regards granular degeneration of the kidneys, with albuminuria, and general debility, from insufficient nourishment or defective power of assimilation, as very frequent causes of the tendency to hemorrhage. Andral and Tyler Smith directed special attention to the anæmia occurring in pregnant women. After referring briefly to the various researches upon the increased volume and altered condition of the blood during this period, he enters upon the consideration of hemorrhage itself. The worst cases, he considers, are those in which there is an alternate contraction and relaxation of the uterus, or where there is irregular contraction, following, as frequently happens, from tardy or precipitate labors. "For more than twenty years," he says, "it has been a rule of practice with me to pay careful attention to the health of all pregnant women who come under my notice, well knowing that a healthy pregnancy is followed by a natural labor and a favorable recovery. This led me to examine very carefully into the condition of those who were in the habit of flooding. I found them uniformly out of health; they all suffered from impaired powers of assimilation in one form or other; they were weak, dyspeptic, nervous, with diminished muscular power, * * I always prescribe iron in combination with an alkali or an acid, as the particular circumstances may indicate. As regards anticipating *post-partum* hemorrhage at the time of labor, ergot, given shortly before the birth of the child, answers sometimes, but is uncertain, a moderate dose being better than repeated larger doses. Pressure is generally and deservedly relied upon for ensuring detachment and expulsion of the placenta, contraction of the womb and arrest of unnecessary flow of blood. It is the readiest and most effective means we have at hand; and, in the majority of cases, it is all that is required to check hemorrhage. Grasping the uterus with the hand and holding it firmly is the method in common practice; but when the flow is

very severe and does not yield to this proceeding, it is well to transfer the pressure to aorta—a practice which is, in my opinion, of the utmost value, and the importance of which is by the present race of accouchers much undervalued." "Where the hemorrhage is less severe, the binder, with a triangular-shaped pad underneath, is more effective than pressure by the hand, preventing the uterus from rising in the abdomen and filling with blood and allowing a coagulum to form in the interior." He does not approve of constantly removing the clots from the interior of the uterus whilst hemorrhage is going on, regarding these as the consequence and not the cause. Cold acts at first as a powerful stimulant, producing shock in the system, but as a sedative, if used for a longer time. Opium, where spasm or alternate contraction is the predominating feature of the case, is of the greatest value. "If, then, ergot, cold, pressure and opium have failed to check the hemorrhage, we are called upon to take the next step and inject a solution of the perchloride of iron into the uterus. * * My experience of it has not been great. I judge it to be a remedy of great efficiency, but of doubtful safety." When the hemorrhage has been controlled and the patient passing from a state of shock into one of syncope and collapse, transfusion is the one resource.—*Canada Lancet.*

Electrolysis in the Treatment of Uterine Fibroids.

Dr. Gilman Kimball has in the majority of cases of uterine fibroids disadvised any treatment which would involve a greater or less risk of life, but in nine cases he has extirpated the entire uterus, three of which have been followed by recovery. Of these three two were cases where the operation was performed with a clear recognition of the disease; the third operation was consequent upon an error of diagnosis. Of the six fatal cases one was wrongly diagnosticated, the remaining five occurred in connection with ovariotomy, the diseased ovary and uterus being found inseparably connected. After an ample experience Dr. Kimball can only recall one case in which any purely medical treatment, either constitutional or local, has been followed by any obviously favorable result. In one instance the long-continued use of the iodide of potassium injected into the uterine cavity was followed

by a diminution and final disappearance of a very large fibroid tumor of the uterus. The same remedy, since tried repeatedly and under apparently similar circumstances, has in every instance entirely failed.

Under these circumstances the application of electrolysis was determined upon, and Dr. Ephraim Cutter, after several experiments, has devised an instrument made almost precisely in the form of a surgeon's grooved director, with sharp point and edges, and an ebony handle at the promixal end. It is generally most convenient to attack the disease through the abdominal walls, but in some instances, when the fibroid growth has projected downwards so as to involve a portion or the whole of the neck of the uterus, one electrode may be inserted into the tumor from the vagina while the other passes through the abdominal parieties. As yet no ill effects, local or constitutional, have been observed after the operation. For some hours the patient suffers considerable pain in the pelvic region, and there is some feverish excitement, denoted by a quickened pulse, thirst, and increased sensibility in the direction of the tumor. These symptoms, however, are not lasting, and in a day or two the patient declares herself free from suffering of every kind. Four cases are reported in which electrolysis was used on account of fibroid tumors of the uterus, in all of which the growth of the tumor was arrested or diminished in size, and in one case a large fibroid growth, extending quite up to the umbilicus and not less than eight or nine inches in diameter, had so far disappeared that what remained of it could scarcely be felt. Other cases are under treatment, but as yet it is too early to form any just conclusions as to results.—*Boston Medical and Surgical Journal*, January 29th, 1874.

Treatment of Chloroform Narcosis, by Ice in the Rectum

Dr. Baillée thinks there is no readier or more effectual mode of combating the narcosis of chloroform than that of introducing a small piece of ice into the rectum. But little force is required to pass it through the anus; it melts immediately and causes by its presence a deep reflex inspiration, which leads to respiratory movement and re-establishment of the cardiac function. The method is also recommended to be pursued in the treatment of apparent death in the newly born.—*Bul. Gen. de Therap.*

Ophthalmology and Otology.

Corneal Wart.*

BY C. A. ROBERTSON, M.D.,
Member of the American Ophthalmological Society; Ophthalmic and Aural Surgeon at St. Peter's Hospital, Albany, and at the Troy Hospital.

This case presents features of much interest, both to the profession and to the patient—to the former for its instructiveness, and to the latter not merely for a fortunate escape from a dreadful and uncalled-for mutilation, but also for the restoration of sight to a blind eye.

The patient, named James Taylor, by occupation until recently a grocer, was about seventy years old. He had been afflicted for several years with a dermoid growth, or *wart*, which started on the outer and lower part of the right eyeball and early showed a tendency to intrude upon the transparent cornea. The patient called on me several times at an early period of his complaint and I attempted to destroy the wart by cutting off its surface and then applying chromic acid. This treatment not proving successful or for some other cause, he ceased his visits, and I lost sight of him entirely until he presented himself at the ophthalmic clinic at St. Peter's Hospital in October last.

My friend, Dr. James L. Babcock, of this city, then advised that he should consult me, because he had learned that an opinion had been given at a certain medical institution that the growth on the eyeball was of a dangerous character and that "the tumor" would grow until it became as large as his fist! The only thing to be done, said the sapient "oculist," was to "remove the eyeball." This being cut out of his head, of course "the tumor" would at the same time disappear!

Upon examination I recognized my old *verrucous* acquaintance, only somewhat enlarged. In its growth the wart had confined itself within the limits of the cornea, which it entirely covered, except a very narrow tract at the upper inner margin. As it so completely covered the front of the eye all sense of vision was, of course, obliterated.

In appearance the wart presented a roundish form and a whitish-gray color. To the touch it was soft and unctuous. In structure it was composed of papillæ, which were

*From a paper presented to the Medical Society of the State of New York.

separable almost to the base; and near the lower edge these papillæ stood up in coarse filaments, or little crowded columns, almost a quarter of an inch high. From this they were graduated down until they were nearly on a level with the cornea at the region of most recent invasion.

In order effectually to rid my patient of this somewhat formidable wart, the eyelids were first held apart with the ordinary silver wire speculum, and then with delicate scissors curved on the flat, all the coarser portions which it was practicable to be cut were removed, leaving on the eye only the base of the structure as a raw surface. Then taking a bent lance-shaped knife (*iridectome,*) I carefully insinuated its edges under the upper sessile border of the excrescence, and by gentle manipulation, teased away the adventitious growth from its connection with the surface of the cornea. When the operation was terminated, the color of the iris and the black pupil were visible, and the patient remarked that he could see objects in the room.

Very little reaction followed. The cornea steadily improved in clearness as the natural, superficial or epithelial layer was reproduced, and within a very few weeks the sight became as good as in the other eye, in which the sight was perfect.

The last time I saw the patient was four months after the operation. There was no vestige of the old trouble to be seen, and the cure appeared to be perfect.

Trachoma treated by Gonorrhœal Inoculation.

Dr. Léon Briére reports in the *Bulletin Generale de Therap.*, September 15th, 1873, four hundred and four cases, from various sources, of pannus treated by the inoculation of blennorrhagic virus, derived either from the opthalmia of the new-born, or from urethral or vaginal blennorrhagia. To these he adds five cases in his own practice. Having quoted with approval the conclusion of Roosbroeck, who has never seen any grave accident follow so seemingly frightful a plan of treatment, and who observes, "I regard these results as so complete, so marvellous, and so extraordinary, that I do not believe anything more beautiful exists in all opthalmology," the author sums up in the following indications and contra-indications:

1. Inoculation gives results satisfactory in proportion as the pannus has arrived at a very high degree of development (without incurable complication on the ocular surface). 2. In pannus which is generalized over the whole surface of both corneæ, accidents are most rare. 3. Inoculation must never be practiced in cases of unilateral pannus, as the most scrupulous care of the sound eye will not save it from contagion. 4. Inoculation is equally contra-indicated where the pannus is partial and where the cornea presents points. 5. In cases of double pannus, it is preferable to inoculate both eyes at the same time. It is a matter of indifference whether the inoculating matter be taken from an ocular, vaginal, or urethral blennorrhagia. An individual refractory to the influence of one kind may be affected by another virus, seemingly less active. The pus of acute urethral blennorrhagia is more active than that of the chronic disease. The material of inoculation should be picked up with a pair of forceps and deposited upon the palpebral conjunctiva. If its escape be feared, the conjunctiva may be punctured with a lancet or needle. The course of purulent opthalmia of artificial induction is the same as that of accidental origin. Should the cornea not ulcerate, frequent applications of warm water should be made. Van Roosbroeck lets the affection take its own course. Should the cornea exfoliate (intense pain), Warlomont recommends the application of the nitrate of silver, in stick or solution.—*New York Medical Record.*

Editorial.

Our Legislature.

The twentieth session of our State Legislature has finally adjourned, after four months of earnest labor in the great (?) interests of corporations, monopolies and their own individual advancement, politically, socially, or financially; in fine, they have been most assiduous in the advocacy and defence of every scheme in which large money was involved and consequently large dividends, but have been criminally negligent of those great matters which affect the well-being and prosperity of the country,

amongst which latter, foremost, in our judgment, is that universally neglected (in America, at least) question—the protection of life and health through the enactment of such statutes as shall provide for the punishment of quackery; thus securing to the community and profession alike that protection which will give to the one assurance of safety and encourage the other to devote with greater earnestness their intellect and lives to the philanthropic pursuit of their calling. We speak with sincerity when we say that it is marvelously strange to us that year after year the medical profession are represented in the halls of Congress and State Legislature and yet are *unrepresented*; that gentlemen are sent to the councils of the Nation and State who, before election, had been the warmest supporters of everything which had for its object the advancement of the science of medicine and the protection of its votaries, and yet, when once ensconced in their seats as legislators, seem to forget that they ever had any other profession and that that science—the noblest of all—to which they had professedly early consecrated their lives had sunk into insignificance, and that the health and lives of the community, which they pretend to represent, are of secondary importance, as compared with the almighty dollar; yet such is the case, and we begin to fear ever will be.

Regularly each year the State Medical Society of California occupies its valuable time in the discussion and passing of resolutions addressed to the Legislature, which, if presented at all, having no one working in their interests (for the reason that there is no money concerned), are thrown aside, and scarcely ever are more than presented—and placed on file. Yet, there may be seen any day, during the sitting of the Legislature, amongst the members of the third house or lobbyists, and even in the halls themselves, any number of medical men, all busy hobnobbing and buttonholing members on the floor, talking with the greatest earnestness and vehemence about—what? these questions affecting the welfare of the profession and community at large? No! but upon some matter of private interest,

in which there is some position with a salary attached and which they, as true humanitarians, are willing to make the great personal sacrifice of accepting. Day after day, during the past session, the prominent men of each clique and school of this city were passengers by the various routes to Sacramento, the Mecca of California, all on a pilgrimage of good. To serve God? No! but to serve themselves and mammon, to partake of the "loaves and fishes," and allow every great and general interest to go neglected; and furnish another opportunity at the next session of the Society for discussing another resolution, with the whites of their eyes turned heavenward in evidence of their earnestness, and thus deceive the great mass of the profession as to their sincerity.

When will this condition into which the noble science of medicine, or rather its representatives, have fallen be corrected? When will men cease for a day to look to their own individual interests and devote, unselfishly, that brief period to the interests of their brethren and suffering humanity? We can not answer; but should we be permitted to live and witness this change, we shall hail it as the millennium.

Legal Responsibility of Consulting Physicians.

Under the head of Miscellany appears, in this number of the LANCET, a communication purporting to give "the substance of the circumstances and a verbatim report of the instructions of Judge Morrison to the jury in the case of John Walton *vs.* Dr. David Wooster, recently decided in the Fourth District Court of this city.

If we are to take the text of this communication as presenting a statement of the facts in the case, we do not hesitate to say that, in our opinion:

1st. Dr. Todd, the surgeon in charge of the case, should have been well satisfied as to the condition of the patient's limb, having the conduct of treatment, and if Dr. Wooster

differed with him in diagnosis at their first consultation, he should have called a third consultant, in accordance with the established law laid down in the code adopted many years since by the "American Medical Association," when the dissenting surgeon would doubtlessly have retired.

2d. Dr. Todd testifies that, in his judgment, the shortening occurred subsequently to the removal of the splints and after the patient had left his bed and was engaged in exercising, but does not explain how that shortening could occur, if a proper or firm union of the main fragments of the bone had taken place.

Dr. Wooster testifies that he never saw the patient without the presence of the attending surgeon, but *agreed* with him in the conduct of the case, to wit: the application of the splints, the extension, and the removal of the small fragments of bone; yet adds: "If it had been my case, I would have cut off the leg the first time I saw it." There is a strange incongruity in these two statements, and how it is possible to reconcile the one with the other we confess ourselves at a loss to determine. However, it is not the first time that our court records have furnished similar and greater inconsistencies emanating from the same source—*vide* Hodges *vs.* Cooper.

Dr. Todd, as the attending surgeon, surely was in charge of the case, and, from the evidence presented, it would seem that the treatment by him instituted before the arrival of Dr. Wooster was carried out and that Dr. Wooster simply endorsed the same. Yet the verdict was for the plaintiff, and here is the mystery in which the whole case is involved.

We are in no wise in sympathy with this too common practice of indigent patients instituting suits for damages in cases of alleged mal-practice, and we regret for this reason that a verdict was found for the plaintiff, yet we hope it may serve a good purpose, as the homœopathic law of cure, "*similia similibus curantur*," is brought to bear and we hope may prove effective.

The law, as expounded by the Court, ought to be read with great care by every practitioner, as it would seem

that the responsibility of any given case may easily be shifted wholly to the shoulders of a consulting physician or surgeon, when, to say the least, it should be divided with the attendant.

Address of the President of the California State Medical Society.

We are pleased to be able to announce to our readers that in our pages this month will be found a verbatim report of the annual address of the President of the California State Medical Society, Dr. T. H. Pinkerton, which, though delivered on the 15th inst., we have, through industry, been enabled to print and issue two days later. It will be found to contain some very valuable suggestions touching the great question of the necessity of establishing a higher standard of medical education, a theme which, for years past, has constituted the subject of many similar papers; but, because of so many diverse interests involved, none of the various ideas presented have been practically carried out.

As Dr. Pinkerton very justly remarks, California being so isolated and removed from the influence of competition can very well afford to take the necessary steps, in her State institution, at least, as shall eventuate in a decided advance in this direction; and suggests wisely that one powerful lever would be the endowing by the State of the Medical School, thus placing the faculty beyond the influence of temptation to increase the number of its classes to the end of increasing their individual income. Time, however, does not permit us to discuss this and many other points of a like character in the excellent address of Dr. Pinkerton, but they will receive our attention hereafter.

THE pressure upon our pages of original matter this month precludes the possibility of making the usual "Reviews and Book Notices." This department will receive our attention next month.

Letter from Dr. Haas.

In the February number of the LANCET, we published a letter purporting to come from M. Haas, No. 102 West Thirty-fourth street, New York city, asking to purchase a diploma from the University of California. We commented upon said letter and very plainly stated the facts as to the status of the University, and handled M. Haas in the manner that our judgment dictated he should be. A copy of our journál was mailed to the address of the supposed author of the letter, and has resulted in the receipt of a letter from Dr. Haas, which we give below and which will explain itself.

At the time of penning our article we were suspicious that some one of our friends (?) had attempted to either practice a joke or throw a snare, in the hope of placing the State University (an institution of which all true Californians should be, and we believe, are both proud and jealous) in a false position, that a handle might be made through which the fair escutcheon of the State or its institution would be blackened and the interests of other universities, so called but self constituted, furthered.

Ignoble as such a design would be, yet worse is it to use the name (even though misspelt) of an innocent party to give the dastardly attempt the guise of genuineness and sincerity.

We honor Dr. Haas for the manly course he has pursued in at once entering his disclaimer, and for the determined manner in which he threatens the coward who not only has attempted to bring disgrace upon California and its institution of learning, but, in order to accomplish his design, exposed seriously the reputation of an honest gentleman, which is an act at once dastardly and cruel, and deserves the punishment which the law provides for the worse than would-be assassin:

102 WEST 34th STREET, NEW YORK.

R. BEVERLY COLE, M.D.:—*Sir*:—I am in receipt of your valuable journal and am mortified to see my name (modified and mis-spelt) negotiating for the sale of a

"Diploma" from the University of which you are Dean. I have never penned a line to you, or any of the Faculty who comprise your honorable Board, in reference *to such* or any other matter. Am a graduate of the New York College of Dentistry (an institution of its kind second to none in the world), and as a specialist, am practicing such in this city. What motive prompted the "mountebank" in writing you from my address is hard for me to conjecture. Either his motive was to cast contumely upon my "fair name" or upon your "worthy institution," the obtaining of a Degree never occurring to him. Nevertheless, I heartily admire your indomitable spirit in endeavoring to squelch the sale of Diplomas and obliterating these demeaning charlatans and parasites, who all along have sapped at the profession and endeavored to cast contumely upon it. The means of the medical press should strenuously oppose and exterminate all institutions harboring and offering the same for sale. The effect alone from this source would be most beneficial. Should I be so fortunate as to "stumble upon" the individual, the severest penalty of the law shall be his reward.

Hoping you will state in your valuable journal my *innocence* in relation to the correspondence which makes me an "innocent martyr," I remain

Your most obedient servant,
GUSTAVUS HAAS, D.D.S.,
102 West 34th Street,
New York.

California State Medical Society.

It is to be hoped that our readers will bear in mind the annual meeting of this Association and make every reasonable effort to be present.

The Convention will be held in "Corinthian Hall," in the Mechanics' Institute Building, Post street, above Montgomery.

We learn that extensive preparations have been made by the Committee for the meeting and entertainment of our visiting brethren.

Apologetic.

We feel it incumbent to apologize to our readers for the brevity of the editorial matter in this month's number of the LANCET.

Ill health necessitating an absence from the city for nearly a month past is our excuse, which we hope may be satisfactory.

In our next number we hope to be able to give our impressions of the several places of resort for invalids in the southern portions of the State, including particularly, Santa Barbara, San Luis Obispo and Paso de Robles—Hot Springs.

WE take pleasure in calling attention to the notice below of Dr. Atkinson, Permanent Secretary of the American Medical Association addressed to secretaries of medical organizations and hope that those interested will respond promptly:

Secretaries of all medical organizations that have adopted the Code of Ethics are respectfully requested to forward to the undersigned a complete list of their Officers with their Post-Office addresses, and the number of their members in good standing. This is the only guide for the Committee of Arrangements in determining as to the reception of delegates.

It will also enable the Permanent Secretary to present a correct report of the Medical organizations in fellowship with the Association.

WM. B. ATKINSON, M. D.,
Permanent Secretary American Medical Association,
1400 Pine street, Philadelphia.

THERE is a great difference between a cunning man and a wise man, not only in point of honesty, but in point of ability.—*Bacon.*

Miscellaneous.

[COMMUNICATED.]

The Legal Responsibility of Consulting Physicians.

The case of John Walton *vs.* Dr. David Wooster, recently decided in the Fourth District Court of this city, is of interest to the medical profession, as giving expression to the law of this State in relation to the responsibility of consulting physicians and surgeons. The suit was brought for $30,000 damages for alleged malpractice; and the verdict was for plaintiff for $1,100.

We give the substance of the circumstances of the case and a verbatim report of the instructions of Judge Morrison to the jury, as furnished us by the official shorthand reporter of the Court.

John R. Walton, the plaintiff, 20 years of age; in good health in September, 1871, was kicked by a horse, causing a compound comminuted fracture of the tibia at the junction of the middle and upper third, and dislocating the fibula upwards. He immediately procured the attendance and services of Dr. David Todd, who, with an assistant, administered chloroform to the patient, reduced the dislocation and brought the leg into position, retaining it there by the use of a double-inclined splint. Two days after the injury, at the suggestion of Dr. Todd and consent of the patient, Dr. Wooster was called in to see the case and to give his opinion. Dr. Wooster examined the leg, differed with Dr. Todd in believing that the fibula was fractured as well as dislocated, but suggesting no change of treatment. Dr. Todd testifies the limb was kept in its proper position and at its proper length by continuous extension. The plaintiff testifies no extension was ever made. Two or three weeks after the first visit, Dr. Wooster again visited the patient with Dr. Todd, examined the wound and consulted with Dr. Todd, and, so far as the evidence goes, suggested no change of treatment, but said the case was doing finely. At the end of forty days, Dr. Wooster made this third and last call upon the patient, in company with Dr. Todd. The patient was then placed under chloroform, and three very small loose fragments of the tibia were taken from the wound; and the splint was then finally removed, and the patient advised to get up and be out of doors as much as possible, for the benefit of his general health. Before the portions of bone were extracted,

there was an offensive discharge of pus containing microscopic particles of disintegrated bone; but in two weeks after the operation the wound was perfectly and permanently closed. At this time—eight weeks after the injury—the patient says his limb was in the same condition it is now; an inch shortened; the fibula dislocated and riding over the head of the tibia; and the foot turning inwards so as to make a deformity very apparent.

Dr. Todd testifies—I do not think there was any shortening of the leg when it came out of the splint; I think this shortening has all occurred since it came out of the splint.

Dr. Wooster testifies that he never called upon the patient alone; that he saw him only three times and always in company with Dr. Todd; that he agreed with Dr. Todd that the portions of bone should be extracted and acted as his assistant in the operation; never made any charge or claim for his services and never received compensation therefor; thought Dr. Todd's treatment was correct and proper under the circumstances; "If it had been my case, I would have cut off the leg the first time I saw it!"

The Court then instructed the jury as follows:

"The law mentions three grades of negligence: slight negligence, which is want of great care and diligence; ordinary negligence, which is the want of ordinary care and diligence; and gross negligence, which is want of even slight care and diligence.

The general rule is that a medical man who attends for a fee is liable for such want of ordinary care and diligence or skill upon his part as leads to the injury of his patient. To render him liable, it is not enough that there has been a less degree of skill than some other medical men might have shown, or a less degree of care than he himself might have bestowed; nor is it enough that he himself acknowledged some degree of want of care; there must be a want of competent and ordinary care and skill, and to such a degree as to have led to a bad result. But a physician or surgeon is bound, not only to use such skill as he has, but to have a reasonable degree of skill.

If the practitioner frequently informs the patient of his want of skill or the patient is in some other way fully aware of it, the latter cannot complain of the lack of that which he knew did not exist.

The peculiar nature of the services the medical man undertakes to render often makes it his duty to continue them long after he would gladly cease to do so. He may,

no doubt, decline absolutely to take charge of a case; but having once begun the task, he cannot abandon it as freely. Even if his services were gratuitous, he must continue them until reasonable time has been given to procure other attendance; and if he is not attending gratuitously, he has no right to desert the patient before the end of the illness which he undertook to treat, without reasonable cause. This is the law as laid down by Sherman and Redfield on Negligence.

There are two questions in this case which you have to pass upon and decide. The first one is whether Dr. Wooster, the defendant, treated the case professionally; and if you find that fact in the affirmative, the next inquiry is, did he treat it with that degree of skill which was required of him in his profession of surgeon. The defendant relies upon two grounds of defence. In the first place, he denies that he was employed to treat this case or that he ever did treat it; and in the second place, he maintains that the treatment of the case was proper and skillful.

You are to take all of the facts and determine these questions from the evidence. If you believe from the evidence that Dr. Todd had exclusive management and control of the case, he alone is responsible for any injury that was done to the plaintiff, if he was injured by malpractice. If you believe that Dr. Todd and the defendant were associated together in business, that they were partners, that they shared the fee and participated in the treatment of this case, the defendant is liable for the acts of Dr. Todd as much as he would be if the acts were his own.

Did the defendant go there simply as a consulting physician? and did he not have, at any time, any control or management of the case? You have heard the testimony upon that point and are to determine from the evidence whether or not he had at any time had the management and control of the case, or whether he simply advised Dr. Todd and Dr. Todd accepted and acted upon his advice or rejected it and acted upon his own advice, at his pleasure.

In regard to the measure of compensation, if you find a verdict in favor of the plaintiff, it is proper for the Court to state that this is not a case in which a jury is authorized to allow what the law calls vindictive or exemplary damages. The law awards such damages in cases of this kind as will compensate the party, as far as compensation can be given by law for an injury which was the necessary unnatural result of this malpractice, if you find there was

such. And in fixing that compensation, the law establishes no fixed standard by which the jury can be governed. It is a question which is left to the sound judgment and discretion of the jury. A patient is entitled to receive at the hands of his surgeon such reasonable skill and diligence in the treatment of the case as are ordinarily exercised by well-educated surgeons. And in judging of the degree of skill which the surgeon should bring to the service of his patient, regard is to be had to the advanced state of the profession at the time.

If the jury believe from the evidence that Dr. Todd asked and obtained the consent of the plaintiff to call in the defendant as consulting physician, the defendant would be liable for his own acts, if any, of maltreatment, and if his advice and counsel controlled the case, he would be answerable for the character of the treatment.

If the defendant was only a consulting physician without reward, yet if he visited the plaintiff and assisted in the treatment, he is liable for his own acts, if any, of maltreatment."

The jury then retired and after several hours' deliberation returned for further instructions, in reply to the question, "Whether a consulting physician is liable for any damages that may arise from mal-practice, whether he gets any compensation or not?" To which the Court replied: "If a consulting physician is called in and he assumes the management of the case and treats the case negligently while he is acting as such consulting physician, he being allowed to take the management of the case by the attending physician, he becomes liable. A physician or surgeon attending gratuitously is liable for gross negligence only. If Dr. Wooster simply acted as consulting physician and Dr. Todd retained the management and control of the case, Dr. Todd alone would be responsible.

Where a physician receives a fee, a greater degree of care is required of him than in cases where he acts gratuitously. Still the law imposes upon him certain duties and obligations, which he is obliged to perform, although his services may be rendered gratuitously."

In this case, the jury evidently determined that there was malpractice; that Dr. Wooster did not have the control of the case, but that while acting as consulting physician without pay, he coincided with the treatment of Dr. Todd, as he stated in his testimony.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, January, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	391	61	43	10	6	47	5	S. F. B'd of Health.
Sacramento	22	4	2	1	0	0	1	Sac. B'd of Health.
Petaluma	6	1	0	1	0	1	0	Dr. G. W. Graves.
Dixon	4	1	1	0	0	0	0	Dr. A. H. Pratt.
Stockton	7	3	0	1	0	0	1	Stockton B'd Health.
Marysville	4	0	0	1	0	0	0	Dr. A. B. Caldwell.
Placerville	3	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego County	...	..	..	..	.	..	..	Dr. T. C. Stockton.
Oroville	...	..	..	..	..	..	..	Dr. J. M. Vance.
Oakland	...	..	..	..	.	..	..	Dr. T. H. Pinkerton.
Los Angeles	23	4	1	1	1	4	0	Dr. H. S. Orme.
Truckee	2	0	1	0	0	0	0	Dr. Wm. Curless.
St. Helena	2	0	1	0	0	1	0	Dr. J. S. Adams.
Napa City	4	0	1	0	0	1	0	Dr. M. B. Pond.
Watsonville	...	..	..	..	.	..	..	Dr. C. E. Cleveland.
Folsom	1	0	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	...	..	..	..	.	..	..	Dr. C. L. Anderson.
Suisun, Fairfield	...	..	..	..	.	..	..	Dr. S. D. Campbell.
Colusa	2	0	1	0	0	0	0	Dr. Luke Robinson.
Trinity County	...	..	..	..	.	..	..	Dr. J. C. Montague.
Santa Barbara	16	6	0	0	0	2	0	Dr. C. B. Bates.
Redwood City	1	0	0	0	0	0	0	Dr. Kirkpatrick.
San Andreas	...	..	..	..	.	..	..	Dr. C. B. Robertson.
Auburn	...	..	..	..	.	..	..	Dr. A. S. Dubois.
Tulare County	0	0	0	0	0	0	0	Dr. M. Baker.
Siskiyou County	...	..	..	.	.	..	..	Dr. T. T. Cabanis.
Ione City	...	..	..	..	.	..	..	County Recorder.
Placer County	...	..	..	..	.	..	..	County Recorder.

Remarks—As was premised in our remarks last month, the approach of a healthier season for our metropolis is revealed in the above table. It will be noticed that the deaths from Scarlatina have there declined from 81 in December to 41 this month; and that although several deaths from this disease have occurred in our interior towns, still, there appears to be no indication of its assuming a malignant form. This gradual spreading of the disease throughout the State rather strengthens the opinion that it is propagated by contagion—in consequence of being carried from one place to another by scarlatina patients and by persons who are not themselves affected.

Monthly Report of Deaths Registered in San Francisco during February, 1874.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	2	....	....	2	....	....	..	1	1	1	....	....	1
Measles	....	....	....	....	....	....	..	...	....	...	....	....	...
Scarlatina	16	...	10	6	....	....	..	9	7	14	2	....	...
Diphtheria	2	....	1	1	....	....	..	1	1	2	....	....	...
Croup	7	....	4	3	....	....	..	5	2	7	....	....	...
Whooping Cough	2	....	2	....	....	....	..	....	2	2	....	....	...
Typhus and Typhoid Fevers	4	....	....	....	4	....	..	2	2	....	1	....	3
Diarrhœa and Dysentery	3	....	3	....	....	...	..	2	1	3	....	....	...
Cholera Infantum	....	....	....	....	....	....	..	....	....	....	....	....	...
Cholera Morbus	1	....	....	....	1	....	..	1	....	....	....	....	1
Pyemia and Septicæmia	1	....	....	....	1	....	..	....	1	....	1	....	...
Cerebro-Spinal Meningitis	1	....	....	1	....	....	..	....	1	1	....	....	...
Syphilis	1	....	1	....	....	....	..	....	1	1	....	....	...
Alcoholism	3	....	....	....	3	....	..	2	1	....	1	....	2
2—Cancer	8	....	....	1	4	3	..	7	1	1	2	1	4
Phthisis Pulmonalis	53	....	3	5	32	12	1	45	8	4	14	11	24
Hydrocephalus & Tubercular Meningitis	4	....	3	....	1	....	..	2	2	3	....	....	1
3—Encephalitis	7	....	4	2	1	....	..	2	5	6	....	....	1
Apoplexy and Paralysis	11	....	....	....	6	2	3	8	3	....	2	1	8
Convulsions	7	....	6	1	...	....	..	4	3	7	....	...	...
Other Diseases of the Nervous System	7	....	1	....	2	4	..	5	2	1	1	....	5
Aneurism	4	....	....	....	4	....	..	3	1	...	2	....	2
Diseases of the Heart	10	....	....	1	4	4	1	7	3	1	1	....	8
Pneumonia	20	....	7	1	4	8	..	12	8	7	4	....	9
Bronchitis	7	....	2	....	1	4	..	5	2	2	2	....	3
Other Diseases of the Respiratory Organs	12	....	4	....	6	2	..	8	4	4	1	....	7
Diseases of the Stomach and Bowels	10	....	4	1	3	2	..	7	3	5	1	....	4
Diseases of the Liver	11	....	2	....	5	4	..	8	3	2	2	....	7
Bright's Disease and Nephritis	1	....	....	....	1	....	..	....	1	....	1	....	...
4—Puerperal Diseases	1	....	....	....	1	....	..	....	1	....	....	....	1
Atrophy and Inanition and Old Age	22	....	15	1	1	3	2	7	15	15	3	1	3
5—Suicides	1	....	...	....	1	....	..	1	....	....	....	1	...
Deaths in Institutions	69	....	10	4	39	15	1	54	15	11	16	1	41
Still-Births	....	....	....	....	....	....	..	14	9	....	....	....	...
1—Zymotic Diseases	46	15.33	24	13	9	....	..	24	22	32	7	1	6
2—Constitutional Diseases	69	23.00	8	8	37	15	1	58	11	12	16	12	29
3—Local Diseases	116	38.67	30	7	44	31	4	76	40	36	20	1	59
4—Developmental Diseases	27	9.00	19	1	2	3	2	9	18	19	3	1	4
5—Deaths from Violence	9	3.00	2	....	7	....	..	8	1	2	4	1	2
Deaths from Unknown Causes: Chinese	33	11.00	1	2	28	2	..	31	2	1	....	32	...
Deaths from Unknown Causes: Others	....	.....	....	....	....	....	..	....	....	...	....	....	...
Total	300	.....	84	31	127	51	7	206	94	102	50	48	100
Per Cent. to Total Mortality	....	100.00	28.00	10.33	42.34	17.00	2.33	68.67	31.33	34.00	16.67	16.00	33

HENRY GIBBONS, Jr., M. D.,
Health Officer.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR MAY, 1874.

Original Communications.

Compound Inward Dislocation of the Ankle Joint—Reduction—Necrosis of the Articular Extremity of Tibia—Re-section—Recovery, with Perfect Mobility of the Joint.

BY W. S. THORNE, M. D., SAN JOSE, CAL.

June 25th, a farmer living twenty miles from town, whilst endeavoring to restrain a frightened horse, was dragged rapidly down a steep hillside by a rope attached to the animal's neck. In his efforts to keep pace with the frightened beast, his right foot turned inward, thus throwing the entire weight of the body (190 pounds) upon the internal maleolus. In recovering from the immediate shock of the fall he found it impossible to rise, and on examination discovered the foot turned outward, the tibia having pierced the boot-leg and pants. A gaping wound an inch or more extended transversely across the joint through which the extremity of the tibia protruded. The maleolus had been fractured and could be felt beneath the

integument. The periosteum of the extended bone had fortunately escaped much injury and as there appeared no great obstacle to reduction, I determined to do so without excision. This was accomplished, having previously injected a strong carbolic acid solution into the wound. I placed the limb in a rudely constructed box filled with bran, and secured immobility of the foot by adhesive straps. The following day the patient was brought to town, a distance of twenty-five miles, without accident. The limb was allowed to remain in the box containing bran, and the wound frequently cleansed with solution of carbolic acid, glycerine and water. Excessive inflammatory action was controlled by the application of ice. July 15th, Bauer's wire splint was substituted for the box. At this time the aspect of the limb was truly discouraging. An inch of the tibia exposed at the wound evinced signs of exfoliation. The wound was gaping, œdematous and the ankle and leg much swollen, and my anxiety was in no wise diminished by a history of specific contagion, he having already suffered the loss of the septum narium and hard palate from this cause. August 15th, leg in much the same condition. The wound is open and suppurating joint blue and œdematous. Patient has been taking the bitter tonics with iodide of potassium, since which time the wound looks a little better; is quite weak and restive of confinement. August 17th, applied Sayres ankle-joint extension apparatus so as to leave the wound covered only by a valve-like appendage of the bandage; put patient on crutches and sent him home with instructions how to cleanse the wound and dress it. August 29th, general health much improved, appearance of wound about the same, large piece of carious bone occupying tibial extremity. September 18th, under chloroform cut down upon and removed the carious bone. October 5th, reapplied Sayres' apparatus and let patient go about. From this time improvement was decided, the bone granulating and the lost parts being rapidly restored. Passive motion is enjoined daily; tonics with potass-iodide continued.

November 16th, wound nearly healed; motion of joint improving; can wear a shoe and bears a little weight on the foot. December 21st, wound healed and movement of the joint perfect. Shortening five-eights of an inch; can walk easily and rapidly without a cane. The history of this case presents nothing sufficiently remarkable in its results or novel in its management to merit an extended notice and I am only led to do so for the purpose of exhibiting the satisfactory termination of a case where amputation was advised by those who deemed restoration of the limb to usefulness impossible. I believe that my failure to resect the dislocated and extended tibia *delayed recovery*, although the injury to the periosteum was inconsiderable and no great difficulty opposed reduction. The known susceptibility of synovial membranes to take on violent inflammation was exemplified in this case, destroying the periosteum and resulting in cases which I think might have been prevented by re-section before reduction.

On the Correllation of Mind and Body in Certain Diseases.

BY A. P. HAYNE, M. D., SAN FRANCISCO.

That much of the uncertainty and ignorance which, until a very recent period, has surrounded the nature and obscured the treatment of that large class of diseases, known as "mental and nervous" affections, has been due to the traditional idea, that mind and body constituted two distinct and separate studies in the range of human investigation, cannot, we think, at present, be denied.

The fact, however, will appear the less strange when we consider that it has only been, since modern pathology, by rapid strides, has unfolded many of the hidden secrets of disease, and kept pace with the wonderful advance of physiology, in drawing the attention of the human mind to the

study of that "head of the vast system of being of which man forms a part," that the true basis in the investigation of this large class of diseases has been reached. "Hitherto," says a recent writer, "the method of regarding man, which tradition has transmitted to us, through many centuries, 'was to cleave him asunder, and substitute the idea of two beings for the reality of one.'"

In this forced and unnatural separation of the corporeal from the mental, a kind of antagonism was necessarily established, which, until the last few years, has been kept constantly wider and wider apart.

"Having thus divided our being," says the same writer, "into two alien entities, and sought, by all the terms of applause, to celebrate the one, and by exhausting the vocabulary of reproach to lower the other, these two fragments were given over to two parties—the body to the doctors of medicine, and the mind to the doctors of philosophy, who seem to have agreed but in one thing, viz: that the partition should be eternal, and that neither should ever intrude upon the domain of the other."

It is chiefly, as we have already remarked, to the advancement of modern pathology and physiology, that this false foundation of doctrine and enquiry has been overthrown, and that to-day the close and inseparable relations and the mutual dependence of mind and body have been fully established and universally acknowledged by all scientific writers.

In bringing about this momentous result, we propose, on the present occasion, to show how at each step the science of medicine has been advanced, not only in the understanding of hitherto obscure diseases, but in the rational treatment of that large class to which we have just referred.

The first important step made in this direction was, unquestionably, in a clear understanding of the physiology of the nervous system.

The discovery of the two great divisions of the nervous system and the truth of the doctrine of reflex-action,

furnished the key by which many hitherto hidden secrets were brought to light, and has justly placed the names of Sir Charles Bell and Marshall Hall in the front rank of benefactors to humanity.

By these discoveries, not only was the close relation of mental and corporeal functions established, but a higher and more important truth was pointed out, viz: "the definite separation of a large part of what had hitherto been considered as purely mental actions," and the establishment of "the distinction between voluntary and involuntary or automatic action."

While these discoveries divided the functions of the nervous system, and separated the purely mental, as "intellection and volition," from the purely mechanical, as "sensation and motion," they also carried us still farther, and proved that in order to accomplish any of these results, whether mental or automatic, there not only was, but must necessarily be, a movement of more matter and a consumption of material.

The reparation of this loss was accomplished by a process identical in both. Thus, as Dr. Youmans remarks, "the brain repair takes place in accordance with the modes of mental action, just as in the blacksmith's arm; muscular nutrition is commensurate with its exercise and augments its power; so in every kind of mental exercise cerebral nutrition co-operates to raise the standard of nervous power."

Here, by a series of physiological researches, we are at last taught the truth, "that the little cells are the agents of all that is commonly called mind; of all sensations, thoughts and desires; and that the growth and renovation of these cells are the most ultimate conditions of the intellectual faculties with which we are acquainted."—(Dr. Bucknill.)

Again, in speaking of the physiological relations of mind and body, Dr. Mandsley remarks, that "the brain not only receives impressions, elaborates material, recalls residua into activity without consciousness, but responds as an

organ of organic life, to the internal stimulous which it receives unconsciously from the other organs of the body."

Here then we behold, without going farther, what an immense step, had already been made, not only in the overthrow of the doctrine of duality, but in the establishment in its stead the fact of a necessary connection, in the growth and development, of mental and bodily functions."

Modern scientific research, however, goes still further, and points out a closer and still more important connection between them. We allude to the part played by that life-giving fluid—the blood.

We all know that for the healthy exercise of any bodily function, there must be a supply of healthy blood to the organ or part, in order that the process of reparation may keep pace with the comsumption of material which the exercise of such functions creates, and that this supply must be normal, both in quantity as well as quality.

Now, although this fact was acknowledged in a general way also, in regard to the brain and nervous system, yet it was apparently overlooked in investigating the mental faculties, and the disorders to which they are liable; and it was not until modern physiology demonstrated the result, that a healthy development of the functions of the cerebral mass could not be expected with a diseased condition of the circulating fluid, that the true pathology of this class of diseases was rationally understood.

In fact we can no more expect healthy bile to be the product of vitiated blood, than a healthy flow of ideas from a brain poisoned by impure nourishment; nay, we may safely go even still further, and maintain that in many of the so-called trivial departures from the normal state—too slight almost to be noticed—the whole character of the mental operations may be more or less perverted. Medicine, as well as history, is full of instances in proof of this.

We need only cite the jaundiced ideas of a diseased liver or obstructed gall-bladder—the irritable despondency of dyspepsia—the choleric temper of a sufferer from gout—or the misanthropic gloom of an enlarged spleen. We all

know how a depression of spirits lost Frederick the Great an important battle, and a fit of indigestion nearly cost Napoleon his crown.

We may then safely affirm. "that as we can know little or nothing of mental action, except by studying nervous action;"—so we can know little of mental disorders, without studying those bodily derangements to which they owe their origin. There is, in fact, scarcely an organ of our body, which is not more or less implicated in the large class of diseases of which we are now speaking.

As we have just said, "even the caprice of appetite" may influence a man's destiny, and an equally trivial cause dethrone the seat of reason. According to Dr. Hammond, persons have had their whole character changed, by a sudden and brief attack of virtigo. A blow on the head, "may dislocate the memory;" and, the transient delirium of a fever has destroyed conscientiousness. — (Dr. Youmans).

The fact then may be considered as settled, that in the changes which disease and other causes often produce in the properties of the blood, are we to seek for the explanation of many of the mental and nervous disorders which have so long baffled our skill, and been the opprobrium of our art. It would carry us far beyond the limits of this paper, were we to attempt to point out, the influence of a variety of other causes, such as food and drink, mode of life and occupation, as they affect the appetite, thoughts and passions, indirectly through the medium of the circulation; suffice it to say, that too much stress can scarcely be laid, upon the proper study of those physiological laws which govern human development, and the investigation of those pathological conditions which give rise to the vast majority of mental and nervous affections.

We pass now to the second and more practical part of our enquiry.

In what way can the knowledge of these facts be turned to advantage in the treatment of diseases of this class?—We answer, first, in the proper hygienic management of

infancy and childhood. The development of a healthy mental and physical condition, or to speak more exactly, the evolution of a healthy cell-formation is mainly dependent upon the earlier period of human existence. To say that this fact is generally acknowledged, is no excuse for the neglect with which it is treated in the vast majority of instances.

Four-fifths of our infant mortality is due to errors of nutrition and the want of a due supply of pure air and exercise.

Besides this, there is another no less important point, which modern physiology has established, viz.: that there is a tendency of nerve power, at this tender period, "to run in certain channels," and that it is, therefore, of the utmost importance that these channels of thought and sensation should be given a proper and healthy direction.

Another important fact, and one well worthy of attention, is that "brain development and brain repair always corresponds with the modes of mental action," so that (as has been well observed) "given associations and ideas become, as it were, patterns, in conformity to which the infant brain is moulded." Thus we find that in infancy, childhood and youth the brain generally developes in conformity "to the order of the impressions and ideas which it has received."

The fact, then, should never be lost sight of that, at this early period, both mental and bodily life "are manifestations of one and the same organism" growing together, fluctuating together and declining together.

A second practical application of our subject is next naturally connected with the training and education of our youth.

The same facts hold true in this still more important period, only in a stronger and more diversified manner.

We cannot better convey our convictions on this point, than by quoting the words of one who has thus forcibly expressed our own ideas as to the duties of every instructor of youth: "Every teacher should first understand

that education does not consist in knowledge, to be syphoned into the intellectual receivers of the school-room, but the direction of the workings of a mechanism over which neither he nor its owner is omnipotent—a mechanism in which effects follow causes, and which operates according to law. He must, therefore, regard each pupil, not as a mental abstraction, to be classed with other minds, and worked by one universal formula, but as a personal reality —a part of the order of nature which never repeats itself —a being with individual attributes bound inexorably with within the limits of its own organization."

We have left ourselves but little space for the third and last point in which the practical bearing of our subject is applicable.

We allude to the enlightenment which a clearer understanding of the close relation of mental and bodily development is destined to throw upon the treatment of insanity. To fully discuss this subject in all its bearings would perhaps fill a volume—suffice it, therefore, for us merely to state, that a knowledge of this intimate reaction and relationship has, of late years, done more for the cause of humanity than all other causes put together.

It is, in fact, our belief, now that we have arrived at a proper manner of investigating mental disorders, that the time is not far distant when they will be stripped of half their terrors, and become no less curable than other nervous diseases.

As it has long been our own conviction that epilepsy, chorea, and other kindred disorders, are the result of perverted functions, of a primordial local disturbance, reacting upon the brain and nervous centres, and as such are strictly curable diseases, why, we would ask, may not the pathology of insanity be as well defined, and the disease amenable to the same laws of rational treatment?

Of one fact we are certain, and that is, in proportion as medical men have studied the close relation between mental and bodily functions, in just such a proportion has success attended their efforts in the cure and alleviation of mental disorders.

Take, for instance, even that worst and most hopeless form of insanity, idiocy, which until within our own recollection—nay, until within a very recent date—was considered beyond the reach of medical art or skill—do we not now see, that even he, by a proper understanding of the remote and proximate causes of his bodily and mental infirmity, may be taught far more than even the most sanguine imagined to be possible?

Were nothing else, however, gained than the substitution of kindness instead of severity—liberty in the place of confinement and restraint—and amusement and occupation in the place of solitude and idleness, we should say that the study of the close correllation of mind and body, in this class of diseases, had already accomplished a great work.

For the hurried and imperfect manner in which the foregoing remarks are offered, we feel that some apology is due, and in bringing them to a close we beg to own our deep obligation to a recent able lecture of Professor Youmans, delivered before the London College of Preceptors; and as a fitting conclusion, we do not know that we can do better than by appending the sentiment of Descartes, which forms the text of the lecture referred to: "If it be possible to perfect mankind, the means of doing so will be found in the Medical Sciences."

Medical Education—How it Looks.

EDITOR LANCET:—The address of Dr. Pinkerton the President of the "State Medical Society," before the assembly of that body, is noticeable. Like the flood tide it is conspicuous because it is the season for it to be up. Whether it answered the expectations of members of the Society or not does not appear. Though too dry to be amphibious, yet it reminds one of Antoy's crocodile in Shakespeare.

Lepidus.—"What manner of thing is your crocodile?

Ant.—It is shaped, sir, like itself; and it is as broad as it has breadth: it is just as high as it is, and it moves by its own organs: it lives by that which nourishes it: and the elements once out of it, it transmigrates."

Many years ago a member of the legal profession said to me, "I don't think medicine can be called a science." I was not indignant, but the remark made me feel uncomfortable. The address of Dr. Pinkerton in a negative way, gives unwitting proof to support that derogatory opinion. That this proof should be exhibited by the presiding officer of the "State Medical Society," adds sadness to the prior feeling of discomfort. He seems to wholly misapprehend the genious of the healing art.

If he does not turn disease to commodity, and make product the measure of character, at all events his loyal liver jealously inflames against empirics, as a prelate's against unbelief. He forgets the fact, that the first meaning of empiric, is one whose knowledge is matured by trial, experiment, experience, observation, and that the greater part of our proud therapeutic wisdom is empirical. All we know of many choice remedies is empirical. The most painstaking physician is the most scientific and empirical. "Science is but a higher form of common knowledge."

In speaking of the special lines of culture by college professors, the "address" says "he," (the professor) "becomes an authority, not merely because of his own success as a practitioner, but because of his acquaintance with the latest and most approved methods and theories which have been elsewhere suggested." Here the Doctor has tapped a fountain of error, and would baptize his fellow members in it. A Jesuit needs authority, but not the man of science. We do not want authority except with the reason why. Surgery and therapeutics should long ago have learned to distrust and dispense with naked authority. Individual authority, except for a fact, is an impertinence, and belongs to oppressors, imposters and dictators. It is an offence to scientific enquiry. Give to a fact reason and it will speak; multiply it and it will

utter knowledge. Strip yourself of fear and prejudice and you will profit by that knowledge. We want truth and the proof of it. Yes, more : the truth is not sufficient, we want fact, truth, proof, with their demonstration. These secured and personal authority may go to the wind. Authority has done to our profession infinite mischief. Obedient to its behests, and mimicing the example of precedent, one doctor after another, year after year, gave Calomel, "to act on the liver," and "secure bilious evacuations :" until a few years ago John Hugh Bennet, of Edinburgh, demonstrated that Calomel did not increase the amount or flow of the bile, and that it had no action on the liver whatever, or nearly none. It was easy to suppose people had bad livers. It took time and much labor to prove doctors used worse logic. Sir Astly Cooper, by his overshadowing authority, seems to have so over-awed the mind of subsequent Surgeons, as to disperse doubt, banish criticism; and lead his followers to copy his mistakes and perpetuate his errors. When he declared dislocations of the elbow to be but partially out of joint, he was so servilely copied in both type and figure, that every surgical text book in this country up to 1874,—including Gross and Hamilton—reproduces one and the same venerable mistake of showing a dislocated elbow with the humerus of the left arm joined to the radius and ulna of the right arm. I do not say that Cooper was the author of this oversight, but once it got into the text books, it has a long lease of authoritative prominence ere it is corrected. We want knowledge, not opinion or precedent. Give us facts, proofs and demonstration—objects to reason upon,—but away with authority.

Note the following: "In short, we may say that in proportion to the ability with which a School of Medicine promotes original investigation and accumulates the experience of other states or lands ; or in other words, in proportion to its real scientific standing, will be its usefulness and power." That's so! We were waiting for the announcement of this platitude; but why did not the

Doctor add, "and the elements once out of it, it transmigrates."

After enquiring if the number of "regularly educated physicians are not less than in other countries," he says: "The precocious habits of our country have, of course, been felt in the medical profession." Well, what of it? What is wrong? Is chronic tardiness better than a nimble prize? Is precocity an evil? Is it to be blamed and set back? No! On the contrary, it is an intuitive personal power of commanding merit. It is to be hailed with gladness. Alexander Hamilton and J. S. Mill were precocious men.

Of medical education in Europe, Dr. Pinkerton says: "Not only are the essential branches of medicine to be fully understood, but they must be preceded by a knowledge of the subsidiary science." Pray, Doctor, what science is that—"the subsidiary science"? Where do you find it? Is it anything like Antony's crocodile? If so, medicine can stand on it as well as the world formerly did on the turtle's back, and without precocious speed, operate as well—"through by daylight." We might credit the Doctor with a typographical error, remit this comment, and suppose him to mean subsidiary *sciences;* but here it would be needful to again ask, What are they? He cannot mean "a good English education, the principles of natural philosophy, analytical chemistry, comparative anatomy, or zoology and botany," for "these," he declares, are "scientific foundations indispensable to professional success." Now, whatever is a "foundation," is not a subsidy. A basis is not an auxiliary; the main thing, is not an assistant. Whatever is indispensable to professional success cannot be subsidiary to it. So he cannot mean those departments of knowledge above named, and the problem of "the subsidiary science" remains unsolved.

Referring to an imaginary case of a young physician, "three years from the village school, or perhaps the plough," the author of the address says: "In one month, perhaps in less time, he may be called upon to diagnosticate

organic lesion in a case of life and death, or to treat the more formidable convulsive disease." This language must be discouraging to a young M. D. Young or old, he must see in it the resemblance to an Irishman's bull, who pathetically asserts his cup of misery has been overflowing for years, and now he finds it is not yet full. Can a convulsive disease be anything more or worse than a case of "life and death," particularly the latter? Query: What disease is that, "the more formidable convulsive disease"? If it is really more fearful than "life and death," it is bad enough. Where there are two or more ways of looking at a thing, amenity prompts to say the best thing of another we can, consistent with duty and veracity. So, after all, we can see the Doctor may be quite right about "the formidable convulsive disease" being worse than "the organic lesion in a case of life and death," for this reason: we know *convulsive* is derived from two Latin roots *con* and *vellere*—"to pluck, pull." Therefore, he must mean a disease that plucks the life away, and then gives death a pull.

OAKLAND, April, 1874. A. S. HUDSON, M. D.

Case of C. C. Crosby, Indicted for Murder at Camp Halleck, Elko County, Nevada—Important Testimony of Doctor J. W. Fox, of Elko, Nevada.

STATE OF NEVADA *vs.* C. C. CROSBY.

Dr. J. W. Fox—Called as expert and testifies as follows in answer to questions: I am physician and surgeon; have been engaged in the practice of my profession for the period of twenty-six years; have had considerable experience in the treatment of insane; have had quite a number of cases of insanity under my charge. Insanity is divided differently by different authors, and sub-divided by others. The modern writers on insanity doubt the

propriety of any division. The usual divisions are: mania, mono-mania, idiocy and melancholy.

Question—How would *you* define insanity?

Answer—Insanity is a loss of control of the will over the mental faculties or impulses,—intellectual, emotional or sensual.

Question—Does the heritage which a man has from his parents often give rise to a predisposition to mental derangement?

Answer—Yes.

Question—Is this hereditary predisposition ever recognizable in the patient through any peculiarity of temperament?

Answer—Yes; some persons have what is called the insane temperament—a certain neurosis easily prone to suddenly develop into actual disease.

Question—Is this hereditary predisposition confined to any particular degree of insanity?

Answer—No; it may be of any degree so as on the one hand to be roused into violent action through exciting causes, or on the other hand of itself to give rise to insanity, even in the midst of the most favorable circumstances.

Question—Do you recognize in the defendant, Mr. Crosby, any such indications by his temperament and expression of his countenance?

Answer—I do.

Question—What is an insane temperament, and in what manner does it usually manifest itself?

Answer—The subject of such a temperament feels impressed in a way which other people do not feel, are disposed to sudden impulses, passions, strange feelings to whimsical thoughts and eccentricities of action, and carry in their countenance and bearing the marks of their unfortunate heritage. They have what is called the "Diathesis Spasmodica"—an irritable weakness of the nervous constitution in which if there be not at ordinary times positive disease, there is, nevertheless, a well prepared

ground of disease which, under trying circumstances, deprives the patient of his self-control, and if it involves the passions, he becomes for the moment the mere creature of animal impulses ; the abnormal or diseased elements are roused into temporary activity, and the person is as far from the dominion of reason as the subject of unquestionable mania.

Question—As a criterion of insanity, is it necessary that there should exist any delusion or hallucination ?

Answer—No. To require which would be to ignore some of the gravest and most dangerous forms of mental diseases.

Question—Explain this, if you please.

Answer—Because it is through the feeling and emotions that the genuine nature of the individual is revealed. It is from their depth that the impulse to avert actions come, while the intellect guides and controls. The moral feeling being the highest acquisition of human culture, its loss, hence, is one of the earliest effects of degeneration.

Question—If a person in good position, possessed of refined feeling that belong to a certain social state, does after a cause known to be capable of producing insanity in a temperament such as you have described, undergoes a great change of character, lose all good feelings, become vicious and brutally perverse, would it be possible not to see the effect of disease ?

Answer—Yes, it would be impossible; it is always necessary to consider the social condition of any one suspected of insanity inasmuch as it is through the loss of that social feeling by reason of disease that the alienation essentially consists.

Question—Suppose a person of a temperament such as you have described, coupled with an hereditary predisposition to insanity, and at a time when his general health was deranged and his nervous system upset through the influence of some deleterious drug, were to indulge in the use of ardent spirits, would it be likely or unlikely to bring on an attack of temporary insanity ?

Answer—Yes; acute mania is often suddenly developed in subjects possessed with some hereditary predisposition to insanity after partaking of some stimulant and most commonly with active maniacal delirium of a violent kind, and frequently displayed in a marked tendency to homicidal act. This may be and often is the case when but a small quantity of such stimulants has been taken.

Question—Would the fact of the defendant's having taken ten grains of quinine a few hours previously be likely to increase this tendency?

Answer—Yes; there are certain conditions under which a dose of that size might produce delirium in a healthy subject, conditions which will not tolerate even a much smaller dose, without producing great cerebral disturbance.

Question—Upon hearing all the testimony in this case, coupled with your own observations of the defendant while in the capacity of his physician, do you believe that at the time the alleged homicide was committed he was or was not laboring under temporary insanity to such an extent as to render him morally irresponsible?

Answer—I unhesitatingly give it as my firm conviction, that he has not now nor any time since the occurrence any recollection as to what took place and that he is not morally responsible for any act committed at the time.

This closes the direct examination of witness, while the following was elicited by cross-examination, on the part of prosecuting attorney.

The questions put to which the following answers were given were not recorded.

Mania expresses a state of the mind characterized by violent delirium and often accompanied with unnatural physical strength, brutal, ungovernable will, having lost all self-control and reason, and frequently when recovering from such paroxysms, they have no recollection whatever of any acts which they committed. The countenances, so far as color is concerned, are different, some having a flushed face, features swollen, while in others there is a deathlike pallor with the eyes protruding from their

sockets, pupils dilated, a glossy sparkle of the eye; their whole countenance and expression is changed. A principle well recognized is that hereditary predispositions to insanity are frequently transmitted from parent to child. This predisposition may remain dormant to any period of life, and may be suddenly developed by some powerful emotion, sudden shock, disappointment, reverse of fortune or violent anger. Sickness at all times in such cases increases the susceptibility in proportion to the physical derangement by reason of such sickness.

A loss of intellect does by no means necessarily accompany mania, on the contrary, a large number so afflicted exercise a degree of intellectual cunning and shrewdness in all of their actions, greater than in their normal condition, answering intelligibly on many subjects, frequently on all subjects, as though they were not suffering from any attack of mania.

Delusion of the mind may be considered an advanced stage of insanity. The defendant was afflicted with Spasmodic Mania, at the time of the homicide.

Insanity is a loss of control of the will over the mental faculties or impulses. Insanity is not a loss of the mind, not necessarily so, insanity may or may not be attended with loss of physical health. Insanity is an alienation of the mind or derangement of the mental faculties or impulses, it does not necessarily remove from the mind the power of thinking.

I have examined a work on Insanity, called "Bricknell on Lunacy," I believe it is recognized as a standard work.

It is not a fact that it is established by many physicians that all persons are crazy. I am aware that there are some writers who claim that the whole human race are more or less insane, but I claim that it only applies to those of the minority, having a large derangement of the brain, while the majority are guiltless of any such charge for the reason that such conditions "pre-supposes brains."—Ray's work on Insanity, is considered good authority.

I consider Transitory Mania the same as Spasmodic Mania.

Hereditary Insanity may assume any form and any degree of violence. It is not a fact that the insanity of the descendant should be the same kind as the insanity of the ancestor. It is *not* laid down in medical works that the insanity of the descendant must be of the same kind as the insanity of the ancestor, because of the fact that the descendant does not wholly partake of all of the developments and temperament of either of his parents, but that there is a blending of the other parent, in the formation and structure of the descendant, and hence partaking of both, by reason of which, the form, and degree of insanity will be proportionately different.

Question—I ask you if you predicate the insanity of the person upon the insanity of his ancestors; how can you account for the difference in the nature of the insanity of the two persons?

Answer—By reason of the fact that the structure of the brain, its preponderant, its physiological action, his temperament and the whole character of the individual by reason of said blending, is more or less different. Although the germ of the one parent transmitted to the offspring being identically the same, yet when insanity is once developed, it must necessarily assume a form and characteristic phase in perfect harmony with his mental structure, differing proportionally as the difference of the parents and child.

I do not remember just when I took charge of the defendant. He remained under my charge about four days. He had a severe contusion over one of his eyes, which assumed an Erysipelatous character, embracing one side of the face, the wound was very much inflamed. It is impossible to say whether the inflammation would make the defendant delirious or not, or what effect the wound may have on the brain, but as a rule in practice by discovering there is no fracture of the skull nor any concussions following the blow, such as to produce insensibility, and stupor, it is generally taken for granted that the brain has received no material injury. Erysipelas is liable to produce delirium

if it were to extend to the substance of the brain, or its membranous coverings, but not otherwise, it did not so extend in this case, since it was everted in its incipiency. Defendant did not exhibit any signs of delirium while under my charge; he was rational all the time, in the ordinary acceptation of the term. I have consulted with the defendant from that time to the present, and prescribing medicines, I have never seen defendant irrational. I don't think defendant unsafe to be at large, if he remains surrounded by pleasant and congenial influences freed from care and anxiety, and especially excitement, he will be entirely safe. I discovered a much better state of the physical condition, and his mind proportionately improved than when he first came under my charge. The state of his mind depends on his physical condition, partially, but not wholly, it depends more on his being free from excitement. I have met defendant several times before he was under my charge, was once his guest at Camp Halleck; I was with him there one night and part of the day; it was the first and most considerable acquaintance I had with him till the time he came under my charge.

My conclusions are *not* arrived at, almost entirely by the testimony I have heard. I do not know that there are any authors who have classified Intellectual Insanity.

I stated that insanity could exist without hallucination and also without delusion. The indications of mania are characterized by delirium of a violent kind, frequently displayed by strong propensities to homicidal acts; it may be permanent or transitory. I consider the insanity of defendant spasmodic or transitory.

Spasmodic Mania may continue for ten minutes or as many hours.

Monomania is insanity upon one or a limited number of subjects. It *is* possible as well as probable that, one of the principal faculties could be deranged without deranging the rest. It *is* possible that all the perceptive powers might become impaired without injury to the reasoning powers, while the reasoning powers being intact, and the perceptives destroyed.

The stand-point of reason from which to build a superstructure would be different from the normal state.

DECEMBER TERM, 1873, Twelfth District Court, Elko County, Nevada. J. H. FLACK, Presiding.

N. C. Green, Clerk; J. H. Rand, Prosecuting Attorney; F. M. Smith, Attorney for Defendant.

Death of Dr. A. C. Donaldson, of Sacramento.

At a meeting of the Sacramento Society for Medical Improvement, held April 10th, the following report was adopted, and ordered printed :

Mr. President:—The Committee appointed to report upon the occasion of the death of one of our number, Dr. A. C. Donaldson, respectfully recommend that the following minute be entered on the records of the Society, and a copy thereof transmitted by the Secretary to the family of deceased :

The painful announcement has been made that under the mysterious dispensation of an over-ruling Providence, our esteemed friend and associate, Dr. A. C. Donaldson, has been suddenly taken from our midst, stricken down in the maturity of years, yet seemingly in enjoyment of perfect health. A worthy citizen, a physician of ripe experience and strict integrity, a gentleman of pure and irreproachable character, and an exemplary christian, his death will be mourned by a large circle of friends, and leave a void in the hearts of those who knew and loved him best, and around the family altar, which cannot be filled. Though unable by reason of his age to attend regularly the meetings of this Society, his heart was with us in the work. He had lived long enough among us to gain our respect for his gentleness of disposition, his kind-heartedness, his genuine sincerity, his strict devotion to duty, and won our esteem and admiration as a true and faithful exponent of the benevolent principles of the profession. These traits —gentleness, sincerity, kindness, and a conscientious observance of what he conceived to be right—were prominent in his character, distinguishing him in his social relations and endearing him to all who knew him.

While we deeply sympathize with the members of his family in this their sad bereavement, let our consolation and theirs be in the reflection that he has now "ceased from his labors."

F. W. HATCH, M. D.
T. M. LOGAN, M. D.
GERRARD G. TYRRELL, M. D.

Obituary.

BY DR. HASWELL.

Gentlemen of the Sacramento Society for Medical Improvement:—Death has entered our ranks and Dr. A. C. Donaldson is no longer among us. You have made it my painful duty, because of the acquaintance of many year's standing which existed between the deceased and myself, of calling your attention to the bereavement and of contributing an obituary to be placed upon our records—a tribute to his worth and of our appreciation of the noble qualities of his mind and heart, as also his professional standing.

Alexander Crawford Donaldson was born in Danville, Penn., February 1st, 1801; and died in Sacramento, March 22d, 1874, at the ripe age of more than three score and ten years. He pursued a literary course of studies in Dickinson College, Carlisle, Penn., and graduated as Bachelor of Arts in 1824. Soon afterwards he commenced the study of medicine, and graduated from Jefferson Medical College, in Philadelphia, a Doctor of Medicine, in 1827.

His first field of practice was in Lancaster, Penn. From thence he moved to his native town of Danville and continued to practice his profession until the year 1834, when he married Phœbe Haight Butler, daughter of Lord Butler, and granddaughter of Col. Zebulon Butler.

Soon after his marriage, Dr. Donaldson removed to Davenport, Iowa, and from thence to Galena, Ill., where

he continued to reside until the year 1845, when he removed to St. Louis, Mo., where he was in active practice until he started across the plains for California in 1852. Dr. Donaldson was among the few physicians who remained in St. Louis during the fearful cholera pestilence of 1849. His wife was among the victims.

He arrived in California in the Fall of 1852, and returned to his home in St. Louis the same year by the Nicaragua route. In 1853 he re-crossed the plains with his family and settled in San Francisco, where he continued to reside until 1856, when he removed to Folsom; and from thence to Sacramento in 1869, as Physician and Surgeon to the County Hospital—a position held by him until the Spring of 1872, when he retired from active practice, and in the bosom of a daughter's family he rested in peace—

> "Which nothing earthly gives, or can destroy—
> The soul's calm sunshine, and the heartfelt joy."

And passed off the shores of Time suddenly and peacefully, surrounded by those he loved, leaving two children—a daughter, wife of A. C. Catlin, Esq., and a son, Z. Butler Donaldson, now in Mexico—to mourn the loss of a kind father.

Forty-eight years of actual practice in the profession of medicine, gave to Dr. Donaldson a rich experience, fruitful in reminiscences, and furnished opportunities of rare allotment to man to compare theories, to note changes in diseases and in practice, and to mark the advance in medical science. It gave to him a large circle of warm friends, both in and out of the profession, as the heritage of a high minded, well qualified and genial Christian gentleman.

Dr. Donaldson is no more; his weary body reposes in the "City of the Dead," but his emancipated soul, we trust, reposes in the "bosom of its Father and its God."

Those who shared his acquaintance will bear me testimony to his goodness of heart, his nobleness of mind, his upright life, his generous impulses, his faithful discharge of duty, and his gentlemanly courtesy to all.

A kind father, good man, and faithful physician, we bid thee an affectionate farewell! With him,

"Life's labor's done,
Serenely to his final rest he passed,
While the soft memories of his virtues yet
Linger, like twilight hues when the bright sun has set."

Surgery.

Treatment of Fistula in Ano by the Elastic Ligature.

BY W. STOKES, F. R. C. S., PROFESSOR OF SURGERY ROYAL COLLEGE OF SURGEONS, IRELAND.

As the substitution of the elastic ligature for the knife in many surgical operations, a method recommended originally by Signor Silvestri, of Vicenza, and recently adopted and strongly advocated by Professor Dittel, of Vienna, is now largely engaging the attention of the surgical profession both at home and abroad, a few particulars of the case of fistula in ano, recently operated on by me in the Richmond Surgical Hospital by this method, will probably be read with interest.

William M., æt. 48, a strong, muscular man, of irritable temper and intemperate habits, was admitted into my wards in the Richmond Hospital, on December 10th, 1873, suffering from fistula in ano. Six years previously he suffered from an abscess at the left side of the anus, which was opened while he was in Whitworth Hospital, under treatment for an attack of delirium tremens. No fistula resulted from this opening. Two years subsequently he suffered again from an abscess in this situation, and in September, 1863, another abscess formed, which burst and a blind external fistula resulted.

On examination shortly after his admission into the hospital, I perceived the external opening of the fistula, situated at about an inch and a quarter to the left side of the anus. On introducing a director in the fistula, I found that it passed upwards and inwards to an unusual height, and also that it was incomplete. In consequence therefore

of the great length of the fistula, and the distance of the external orifice from the anus, I considered it a suitable case for treatment by the elastic ligature, as by the ordinary operation, owing to the amount of tissues which would have had to be divided by the knife, the hæmorrhage would probably have been very excessive and difficult to control. This, considering the patient's habits and constitution, would have been a matter of serious consequence.

I first completed the fistula by Blandin's bistoury, and then I passed a long probe, armed with a double elastic ligature, through the fistula. Owing to its great height, I had considerable difficulty in detaching the ligature from the probe in the rectum; but this I eventually succeeded in doing, and drawing out the loop through the anus I removed the probe, thus leaving the two free ends of the ligature through the orifice of the fistula. I then put the double ligature tightly on the stretch and fastened it securely. This latter procedure was accompanied by a considerable amount of pain, which continued for about an hour subsequent to the operation. A morphine suppository then administered, however, effectually relieved the pain.

On the evening of the fourth day after the ligature was applied it came away, the patient not having lost during the entire proceeding a single drop of blood. The parts divided by the ligature united with remarkable rapidity, and recently the patient returned home in excellent health and spirts.

The impression produced in my mind by the result obtained in this case has been most favorable, the case being one which, owing to the peculiar habits and constitution of the patient and the great height of the fistula, most surgeons would have hesitated or declined operating on by the ordinary method of division of the sphincter.

Although I entertain grave doubts as to the alleged immunity from the occurrence of pyæmia, which Professor Dittel claims for this method, I am confident it will be in many instances, preferred by operating surgeons to cutting instruments, "when," as Professor Dittel observes, "he has to undertake operations in cavities and canals which are out of sight, or which are so narrow that it is extremely difficult, if not impossible to use cutting instruments within them, or when he feels certain whether he may be able to tie the bleeding vessel (as in anal fistulæ situated high up). In other cases he will desire to avoid hæmorrhage and the formation of large wounds in children or in old persons.—*Medical Press and Circular.*

Restraint of Hæmorrhage during Operations in the Mouth.

BY E. ANDREWS, M. D., PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY IN CHICAGO MEDICAL COLLEGE.

Some operations of the mouth, particularly staphyloraphy and uranoplasty, are greatly embarrassed and very much prolonged by the following circumstances:

1. The operator and the anæsthetizer cannot both work at the same time, so that they are obliged to alternate—the operator ceasing his work whenever the patient begins to awake, in order that the anæsthesia may be renewed.

2. These operations, considering the small amount of tissue cut, are very bloody, compelling frequent cessation of work, to arrest the hæmorrhage and clear away the blood.

It follows that very often between the suppression of hæmorrhage, the clearing out of blood and mucus, and the repeated re-anæsthetizing, the surgeon gets a vexatiously small proportion of the time in which he can use his instruments.

The following successful experiment, to obviate these difficulties, was performed at the suggestions of my friend Dr. Ira Manly, of Markezan, Wis.

The patient being first etherized in the ordinary way, the mouth was held well open, by an instrument which I devised some years ago for this purpose, and have used ever since with excellent results. The paper cone and towel with which the etherization was first accomplished, was now laid aside, and Dr. Manly, taking an ether spray apparatus in his hands (such as is used for local anæsthesia by freezing), directed the spray upon the roof of the mouth; but not with such intensity as to produce freezing. The cold thus produced contracted the vessels, so that I was able to perform uranoplasty with comparative little delay from hæmorrhage, or accumulation of mucus. At the same time, the patient was constantly inhaling the vapor of the spray, so that the anæsthesia was steadily maintained without interrupting my operative procedures. The result of this method was so admirable, that I desire to call the attention of the profession to its great advantages. —*Medical Examiner*.

WASTE not a moment of time.

Modification of Pirogoff's Operation.

Prof. William Pirrie, of Aberdeen, describes as follows, in his late work on surgery, his own modification of Pirogoff's operation:

"The surgeon, standing on the left side of his patient, with the heel, in the first step of the operation, directed towards himself, and having with his left hand taken hold of the soft parts and drawn them a little backward, so as to secure greater breadth of flap, inserts the knife on one side in front of the malleolus, carries it down across the sole of the foot, and upward to the corresponding point, just at the front and upper part of the other malleolus, taking care to direct the incision so as to pass opposite to the part where the posterior portion of the astragalus rests upon the calcaneum, and to use the knife energetically, so as to cut through all tissues down to the bones. By this single movement of the knife a clearance is made for the saw, by a few movements of which the portion of calcaneum behind the astragalus is speedily cut off from the rest of the bone, the section being from below upward and a little backward, so that the portion remaining in the flap will be a little longer from behind forward, below than above. The assistant having slightly changed the position of the leg, so as to make its posterior part to rest upon the table, the surgeon, by a second movement of the knife, unites the extremities of the first incision by a slightly semi lunar incision, using the knife boldly, so as to cut through every tissue in front of the bones, and then, by a few slight touches below, admits of the flap being brought back, and makes a clearance for the saw. By a few movements of the saw, the bones are cut through immediately above the ankle, and this extremely simple amputation is completed by little more than two movements of the knife and two sets of movements of the saw."—*Medical and Surgical Reporter, Philadelphia.*

Subcutaneous Division of the Neck of the Femur for Bony Anchylosis of the Hip-Joint.

Dr. H. B. Sands reports the case of a man upon whom he has operated successfully for bony anchylosis of the hip-joint. The patient was twenty-five years of age, of fair constitution but somewhat irregular habits, and had suffered from a severe attack of articular rheumatism four

years previous to the time of the operation. The right hip-joint was kept in a flexed position during convalescence, and subsequently remained rigid, the thigh being considerably abducted, and flexed on the pelvis at an angle of 110° to the vertebral column. The patient could not rest the right foot on the ground without assuming a crouching attitude, and could not walk without crutches.

The rigidity being found to be due to true anchylosis, the following operation was performed: A long, straight, narrow bistoury was thrust through the soft parts just above the great trochanter, and carried directly in front of the cervix femoris, so as to separate the soft parts from this aspect of the bone. A narrow saw was introduced along the track made by the knife, and the neck of the femur divided. It was then found necessary to sever the tendons of the adductor longus and the tensor vaginæ femoris, after which the thigh was immediately and readily extended to a right line with the body, and kept there by a weight attached to the foot; the patient being put to bed and confined there for six weeks, in the hope of obtaining bony anchylosis in the straight position. As it was found at the end of that time that the parts remained freely movable, he was permitted to get up and move around on crutches. There was a shortening of a quarter of an inch. He now walks quite well and steadily with a cane, a useful and satisfactory false joint having resulted.—*New York Medical Journal*, December, 1873.—*Medical Times, Philadelphia.*

Successful (?) Removal of the Spleen.

In the *Raccoglitore Medico*, Dr. Sonsino gives an account of a case in which, on June 20th, Dr. Attilio Urbinato, of Cesino, removed a hypertrophied and mobile spleen. The incision was made in the middle line, and prolonged above the umbilicus, being at least seven inches in length. The operation was performed without much difficulty. After tying three small cutaneous arteries, opening the peritoneum, and drawing aside some loops of intestine, the spleen was seen, free from all abnormal adhesions, and of enormous size. At the inferior part was seen the gastro-splenic epiploon, which was adherent; and the vessels here were extremely dilated. At the upper part was seen the lower portion of the pancreas. The epiploon was detached and

the vessels tied. The ligatures, seven in number, were left inside without further precaution. The few adhesions of the pancreas were overcome without difficulty, simply by means of the finger. The largest vessels, and the connective tissue which surrounded them, were secured by a metallic loop and hempen ligature. The "toilette" of the abdominal cavity was made with great care. The patient lost but little blood. The ligatures of the vessels tied were passed out between the sutures, of which there were five deep and five superficial. The spleen weighed two and a half pounds. The operation lasted an hour. The patient bore the chloroform well, and subsequently appeared to be progressing favorably, but died of peritonitis three days after the operation.—*British Medical Journal.—Atlanta Medical and Surgical Journal.*

Excision of the Larynx.

BY PROFESSOR BILLROTH, OF VIENNA.

Dr. T. L. Stuever, of Vienna, writes to Dr. E. Montgomery, of this city, that a short time ago Professor Billroth extirpated the greater portion of the larynx in a patient at the Vienna Hospital. It seems this organ was very extensively involved in carcinomatous degeneration, and with the hope of saving the patient's life, this very difficult and dangerous operation was undertaken and successfully performed. Dr. Stuever, who is assistant to Dr. Stork, the celebrated laryngoscopist, writes that the latter has invented an *apparatus to supply the place of the excised larynx, by which the patient is enabled to speak distinctly, so as to be audible at a distance of ten feet*, but of course without much modulation of voice. Dr. Stuever also mentions that he can breathe and swallow with perfect ease and composure, and is in every way in a most promising condition for complete recovery.

By this bold and hazardous operation, the distinguished Vienna Professor of Surgery has added another laurel to his crown, and great credit is due to Dr. Stork for the talent and ingenuity displayed by him in supplying an apparatus as a substitute for the excised larynx. We also learn from the same source that Dr. Stork is preparing for early publication a comprehensive work on laryngoscopy. —*St. Louis Medical and Surgical Journal.*

Pernio Treated by Electricity.

Dr. Alonzo L. Leach describes, in the *Philadelphia Medical Times,* his method of treating chilblain by electricity. He considers that we have, as the result of frost-bite, a partial or complete paralysis of the vessels as well as a nervous element, evinced by the pain and the intolerable itching. Electricity tends to give tone to the parts and restore them to their normal condition. This is the result sought for in all applications, but they only do so temporarily in a majority of cases. The cause re-appearing, the pathological condition still remaining, we have a return of all the symptoms. The secondary or induced current applied for period of time every day, or at longer intervals, will place the parts in a healthy condition and effect a permanent cure.

As chilblain is just now a complaint of the season, it may be well to append another method of treatment, which is that adopted by the writer. The foot is first soaked in a bath as hot as can be borne, for fully fifteen or twenty minutes. The effect of this is to alleviate the pain and itching of the subacutely inflamed subcutaneous tissue; and afterwards the part is painted with tincture of iodine for a few times. The results really disappoints one. Dr. Balfour, of Chelsea Royal Military Asylum, recommends the application of iodide of ammonium, prepared by mixing equal parts of the liquid iod. comp. and aqua ammonia. Dr. Leach, above quoted, says of this, that he finds it ordinarily most marked in its action.

THE CHAIR OF PHYSIOLOGY AT EDINBURGH.—It is stated the chair of Physiology in the University of Edinburgh is likely to become vacant by the resignation of Dr. Hughes Bennett, whose health is, unfortunately, far from robust. The names of four distinguished graduates of the University—two resident in Edinburgh and two in London—are mentioned as those from among whom his successor may be selected. But we believe that, although it is probable that Dr. Bennett will think it proper to resign his chair at no distant date, it is by no means certain that he may not make another effort to perform some of its duties next session.—*British Medical Journal.*

Institutes and Practice of Medicine.

On the Treatment of Typhoid Fever with Cold Baths.*

BY PROFESSOR BEHIER.

I do not intend to give you, to-day, a complete and didactic exposition of the different therapeutic indications which typhoid fever offers, and the measures of treatment that correspond to these indications. My chief object is to call your attention to a method of treatment, too little diffused among us, and which you have seen me apply to the patients in the Salle St. Antoine, whose disease I have just been studying with you. I wish to speak of the methodic use of *cold plunge baths*. I hasten to state that I do not partake of the exclusive enthusiasm which certain authors profess for this mode of treatment, nor do I recommend its universal and systematic employment. But I do believe that we have here a real and efficacious progress, which I believe made a point of exhibiting it to you, and which I have it at heart to propogate and to popularize to the extent of my power.

The necessity of combating the symptom *fever* has for a long time past become a truth which is almost a childish truism. The times are gone by in which, according to the old Hippocratic idea, the ferbile movement was considered as an effort of nature destined to subdue or to eliminate the morbific principle, a salutary effort which the physician ought rather to favour than oppose. We now know that this disorderly action is always dangerous and often fatal: dangerous by the exaggeration of internal oxidations and the rapid consumption which accompany the febrile movement: dangerous above all by the modifications of the blood which are produced by these excessive oxidations, which pour into the common medium organic débris which are often very abundant, and which are not sufficiently eliminated. But the elevation of temperature is the index and the result, if not the cause (or one of the causes) of this febrile state. We may hope, then, that the intensity and the consequences of the fever will be diminished by means which will reduce the temperature of the body. But if there be a malady in which the efforts of treatment should especially be addressed to the element *fever*, surely

*From a clinical lecture delivered at the Hotel-Dieu. Translated from the *Bulletin de Therapeutique*.

it is in the most obstinate and long-continued of our pyrexias—in typhoid fever.

It is about twelve years since I was one of the first to introduce into our country the employment of a valuable therapeutic agent in febrile affections. I speak of *alcohol*. This is not the time or place to speak of internal action of this remedy. Does it diminish the combustion of the tissue by directly opposing itself to that process, just as, when in a certain degree of concentration, it hinders the continuation of the alcoholic fermentation? I believe this, but it is of little consequence to us just now. An invariable fact is, that in sufficient dose it lowers the central temperature both in the normal and in the febrile states; it is therefore an antipyretic remedy. It is in this character, and not as a tonic, that you see me administer alcohol, in drinkable shape, to our febrile patients, often in considerable doses, under the euphemistic designation of *potion de Todd*. Observe carefully, however, that these doses are divided. Thus you will prescribe 80 to 200 grammes (3 to 7 ounces) of brandy in 8 ounces of water with a drachm and a half of tincture of cannella and an ounce of syrup. You will give a tablespoonful of this every two hours, diluted with three or four times as much water, if the patient finds the mixture too strong. This remedy, I repeat, gives good results; but I have no hesitation in saying that we are in possession of a much more energetic and habitually efficacious antipyretic remedy in the rational employment of cold water, of which I now wish to speak to you.

It was the English physician, James Currie, who first had recourse in a regular and scientific manner to the external employment of cold water in the pyrexias. The patient, in full fever, was placed in an empty tub, and several cans of water were poured over his head and trunk from a certain height. The method of Currie consisted, then, in the use of *cold affusions* more or less frequently repeated. The object which he proposed to himself was not to cause abstraction of heat and a diminution of the internal temperature, but to obtain, by these smart and brief affusions with cold water, a consecutive excitement of the circulatory functions, or what is called *reaction*.*

There are a certain number of cases in which cold and sharp affusions are formally indicated: this is especially the case in adynamic conditions with profound intellectual torpor and a tendency to depression of the respiratory and circulatory functions. The affusions, by lashing, as it

*This scarcely does Currie justice.—EDITOR *Practitioner*.

were, the activity of the nervous centres, dissipate, better than any other means, these conditions, which are allied rather to a defect of inervation than to febrile elevation of temperature. This is not the object which one attempts to gain in employing cold water according to the method which we are studying. In that method we propose, on the contrary, to abstract a certain quantity of the heat the augmentation of which is crushing the patient. To this end we employ cool water more or less smartly applied. A first degree consists in washing of the entire body, repeated four or five times a day: you saw me adopt this plan with the young girl in bed No. 8, Salle St. Antoine. In her the affection of the bowel presented itself with an *ensemble* of moderate symptoms, and, on the whole, was but little formidable; above all, the fever kept at a reassuring level; the medium temperature was 39° C. (102°·2 F.) in the evening, and 38°·5 C. (101°.5 F.) in the morning. There was thus no indication for an energetic antipyretic treatment, and we confined ourselves to giving 3 oz. of brandy, and using the cold spongings. We thus managed to keep the fever to its moderate type, and on the twentieth day the girl entered definitely in the apyretic stage. I do not doubt that the cold spongings assisted this rapid and fortunate issue.

The man who restored to honour the treatment of the pyrexias, and especially of typhoid fever, by cold water, is a practitioner of Stettin, Ernst Brand. In 1861 he published the results of his treatment in a book entitled "Hydrotherapy of Typhus." This treatment constituted a true method in the rigorous and dogmatic acceptation of the word. In a recent publication M. Franz Glénard has expounded the system of the Stettin physician with talent, and has related observations on thirteen patients treated at the Hospital de la Croix-Rousse rigorously and in the spirit of the method. Liebermeister, in speaking of Brand's book, while acknowledging the decisive impulse which it has given to the therapeutics of febrile affections, regrets to find it a too ardent and enthusiastic proselytism. We might pass the same criticism on the memoir, otherwise very interesting, by M. Glénard. We may say, in passing, that one can easily understand the enthusiasm of M. Glénard. The method, as you will see, offers great advantages; but, besides this, M. Brand has a right to the respectful gratitude of everyone in our country of France.*

*A few expressions of strong and painful feeling, growing out of the events of the war are here omitted.—EDITOR *Practitioner*.

This treatment of Brand's consists in the regular and systematic administration of cool baths (20° C. or 68° F.) with or without the affusion of cold water upon the head. The regular duration of each bath is fifteen minutes, even when shivering occurs quite at the commencement.

It requires a certain energy on the part of the physician to apply this method, considering the pitiable condition which the patient presents in some cases. On coming out of the bath the patient is enveloped in a woollen wrapper, and immediately covered with clothes.

On the average it is necessary to give at least eight baths in the twenty-four hours (a bath every three hours, night as well as day). According to Brand it is an error of the gravest kind to wait till the temperature reaches a serious elevation ; he says that we should prevent the rise of heat, and not wait to combat it. He denies there is an efficacy in "those hybrid methods which give one or two baths a day, and which are nothing but a *cruelty* to the patient."

We see by these quotations that Brand is inspired with all the intollerances of a systematizer. In fact the treatment by baths, one after the other, is in his mind, not only directed against the symptom fever, but also against the essence of the morbid process ; in a word, it is, what the author calls it, a *specific* treatment. It is evident that a treatment thus rigorously and mathematically formulated must rest upon a theory ; that of Brand is the following. In agreement, so far, with recent mycological researches, he attributes the typhoid process to an internal fermentation, azymosis. But, says he, if we mix a solution of malt with a proper quantity of beer-yeast at a temperature of 16° C. (59° F.), we get a tumultuous fermentation producing alcohol after a determined period of three days. If, then, we cool the mixture, which has risen to 36° C., (95° F.), below 16° C., the fermentation will cease; on the contrary, it will reappear if the temperature rises again. Brand, in view of these observations, supposes that the typhoid ferment, also, cannot develop and act except at a certain temperature, and hydrotheraphy renders it powerless and arrests its production by incessant cooling of the blood.

I need not point out to you how much of the arbitrary there is in this theory ; but it was important to direct attention to it, for it shows well the essential indication which Brand thinks that he fulls by his treatment. What he seeks to obtain by this pitiless series of immersions is not only the lowering of the temperature ; his views are

higher than this; he wishes to reach the very source of the evil; he aims at arresting in this manner the morbid fermentation which is the point of departure of the disease.

Hence the rigid inflexibility in this prescription; one must be incessantly on one's guard and watch the ferment for fear it should begin to work again and cause us to lose all the benefit of the treatment at once.

Such is the method by which hydrotherapy has made its reappearance in the treatment of typhoid fever: it is the same which M. Glénard recommends. But in these latter years our conceptions of fever are singularly modified, and the water treatment of pyrexias—especially of typhoid fever—has shared in that progress. It is this last phase into which the question that occupies us has entered.

The febrile elevation of temperature can only be due to two causes; either a diminution of the waste of heat production remaining the same; or else an increased production of heat, the source of waste remaining unaltered. The first of these views is maintained by Traube, the second by the majority of observers, who support it especially by reference to the increase, during the febrile act, of the excretion of urea and carbonic acid, which is an indisputable proof of a positive augmentation of organic combustion. Quite recently, in a memoir containing laborious researches on the inner significance of febrile phenomena, Senator* arrived at a mixed conclusion, which unites the two views. According to him, the febrile heat is due at once to increase of combustion and to retention of caloric.

I propound these theories to you in order better to prepare your mind for appreciating the treatment. Whatever may be the fate of the doctrines which have just been laid before you, the therapeutic indication in these cases appears to be a simple one; to increase the loss of heat by plunging the patient into a cooler medium with which he will tend to equalize his temperature. But affairs are far from proceeding with such simplicity; man, like all warm-blooded animals, enjoys the privilege of striving against the sources of heat-waste, in virtue of what is called the *heat-regulating power*.

If we place a healthy person in a cold bath, the loss of heat will be moderated by a double mechanism. On the one hand the spasmodic contraction of the peripheral vessels, by diminishing the cutaneous circulation, repels the mass of the blood towards the deeper cavities, where it is better shielded from loss of heat by radiation. At

* Neue Untersuchungen uber den fieberhaften Process. Berlin, 1873.

the same time, the production of heat itself is notably increased, as it has been proved by the quantity of carbonic acid which is exhaled. It is thus not easy to reduce the internal temperature of a healthy person, considerably, by a cold bath. We only produce a slight lowering, which is quickly compensated, and more than that, from the period known as that of *reaction*. It is only when the bath has been excessively prolonged or of a very low temperature that the cooling presents a certain intensity and duration, and it is then not free from danger.

As Liebermeister has pointed out, the conditions of regulation of temperature are the same in the fevered as in the healthy subject; and we may, like him, regard fever as a transitory but more or less enduring condition, during which the organism tends to maintain its equilibrium of temperature at a higher degree than the normal, at 39° C. (102°·2 F.) instead of 37° C. (98°·6 F.) The means by which the fevered organism lowers its temperature are the same as those employed by the healthy body; the resistance, however, is less energetic and less efficacious; in other terms, it is much more easy to lower the temperature by a degree or two in a fevered, than in a healthy man.

It is this, in fact, which favors the antipyretic action of hydrotherapy, and it is for want of taking heed of this capital difference between the normal and febrile states that various authors have contended, on *a priori* grounds, against the employment of cold water in the treatment of pyrexias.

We see, then, that if cold water moderates fevers, it is not, perhaps, by moderating combustions (for it is proved, on the contrary, that it tends rather to increase them), but by hastening the departure, the waste, of caloric. Its action is thus diametrically opposed to that of alcohol, quinine, and other agents which directly attack and moderate the febrile combustion; its *role* is that of spoliation, not of economy of waste.

In an absolute point of view, hydrotherapy, in whatever form, does not constitute an anti-febrile remedy in the rigorous sense of the word; it does not restrain combustion, it only masks and attenuates to some extent the consequences of combustion, especially the elevation of the temperature of the blood.

Fever does, in fact, betray its action on the economy by two results which are distinct, though closely allied; the rapid consumption of the tissues on the one hand, and the

elevation of temperature on the other. Each of these conditions has its own dangers, and consequently affords precise indications. In the slow, chronic fevers (*hectics*, in a word) the danger consists less in the elevation of the temperature than in the gradual and progressive deperishing of the organism; it has therefore never entered the mind of any physician to employ cold water in these cases, and thereby to render more active the very wasting which threatens the patient. On the contrary, that which constitutes the immediate and direct danger in pyrexias when the fever is more acute, so to speak, is not so much the exaggerated histolysis as the very fact of the febrile increase of heat; the delirium, the convulsions, the drowsiness, the tendency to syncope or asphyxia, the whole *ensemble* of ataxic and adynamic phenomena, is due, we can hardly permit ourselves to doubt, to the pernicious action of a superheated blood upon the nervous centres. In a position such as this, our duty before all things is to cool the blood by the rapid extraction of heat from it; an indication which hydrotherapy alone is capable of fulfilling.

[Continued in next number.]

Nitrite of Amyl.

Dr. Amez-Droz publishes (*Archiv de Physiologie*, September, 1873,) an account of his researches on this substance. Together with the details of his experiments, he gives a historical review of the subject, and discusses its probable method of action. Without pretending to decide the question absolutely, the author rather favors the hypothesis that it operates by causing an irritation of the peripheral extremities of the nerves (perhaps the vagus), which, in turn, produces a reflex irritation of the vaso-motor centre, causing a diminution of the tonicity of the walls of the capillary vessels. In regard to the possibility of its being the muscular fibres of the capillaries which are affected, instead of the ultimate ramifications of the vaso-motor nerves, he brings forward the fact that the pupils do not show a constant dilatation under the influence of nitrite of amyl, as having a bearing against the theory of Brunton that it affects the non-striped muscular fibres generally. The fact, observed in nearly all his experiments, that a momentary contraction of the capillaries of a frog occurred whenever

the animal made any violent movements, speaks strongly against any absolute paralysis of the vessels. The author explains the phenomenon by admitting two kinds of muscular fibres in the coats of the capillaries, one set contracting and the other dilating the vessels, and explaining the dilatation produced by nitrite of amyl as an irritation of these latter, the others remaining unaffected, and reacting, to a greater or less extent, under excitation.

The probable primary cause of irritation by nitrite of amyl is the non-oxydation of the blood under its influence. The acceleration of the heart's action and lowering of blood-pressure which follow its use are due to the dilatation of the capillaries; but when the acceleration becomes very considerable, as after injection of the nitrite into a vein, it is possible that the nervous ganglia which give the heart its automatic movements may also play some part in producing the effect.

The method by which the substance is introduced into the system is of much importance in producing its peculiar effects. The speediest and surest way, according to Dr. Amez-Droz, is by injecting it into a vein; the next most reliable method is by inhalation. It would seem, however, to be much more rapidly eliminated when introduced directly into the blood than when only inhaled; and larger doses could, in some instances, be employed without fatal effect than when it was only inhaled into the lungs. By the other two methods by which it can be used, its injection into the subcutaneous tissue, and its introduction into the digestive canal, it is, according to Dr. Droz, comparatively slow and uncertain in action.

The author concludes that, physiologically, the nitrite of amyl will have to take its place as a remedial agent by the side of digitalis. Further investigations are, however, needed to fully determine its therapeutic value.

Treatment of Delirium Tremens.

At Roosevelt Hospital, New York, the standard prescription for this condition is:

℞ Chloral hydrat., grs. xxx.
Potass. bromide, grs. xl. M.

To be given at bedtime, and continued through the day in smaller doses if necessary.

This is the treatment for a fully developed attack. Milder cases are treated by two drachms of the tincture of

lupuline and a bottle of ale at bedtime, and in a majority of instances this is all that is required ; for as soon as the patient has secured a few hours' sleep, the crisis is passed, and he will then begin to take his beef-tea and milk, and come up rapidly. A patient present, who was suffering from alcoholism, and when admitted was very tremulous, was receiving :

℞ Potass. bromide, grs. xxx.
Morph. Sulph., gr. ⅛.
M. S. t. i. d.

Bellevue Hospital.—"What this class of patients most need is food and rest." Rest is usually secured by the administration of either potass. bromide in large doses, grs. xxx, every two hours perhaps, or chloral hydrat., grs. xx, every hour. It is necessary in using the latter remedy to be cautious with regard to the size of the first doses, until the strength of the preparation and the susceptibility of the patient is fully understood. * * Occasionally even large doses will be of no avail. A very common prescription employed is the following :

℞ Potass. bromide, ʒiiss.
Chloral hydrat, ʒiss.
Syr. Aurantii, Aquæ, aa ℥ ij.

M. S. Half fluid ounce, and repeated every hour, if necessary to procure sleep.

Persistent nausea and vomiting must be treated with administration of ice, and the employment of nutritious injections. Careful examination must be made, and repeated, for pneumonia, especially in the Winter, for it frequently comes on very insidiously, without any complaint of the patient.—*Medical Record.*

Temporary Albuminuria the result of Cold Bathing.—Dr. George Johnson reports four cases in which, after protracted cold baths, albumen appeared in the urine for periods varying from a few hours to several weeks. The albuminuria was probably caused by repeated and prolonged immersion in cold water, which, by repressing the cutaneous secretion, may possibly lead to permanent mischief and to structural degeneration of the kidney.—*The Lancet,* December 6th, 1873.

The death of Max Schultze, the celebrated anatomist, is stated to have occurred on the 16th ult., at Bonn.

Gynecology and Diseases of Children.

Diagnosis of Ovarian Tumours.

A translation of an essay on this subject, by Professor Otto Spiegelberg, appears in the last number of the *American Journal of Obstetrics*. He does not detail the different signs of ovarian tumours, but follows the course which the physician at the bedside has to take. Suppose he says, a patient comes who, from enlargement of the abdomen, with abnormal resistance and various unusual symptoms, believes herself to have an ovarian tumour. The first task is to determine whether a tumour exists at all. An affirmative answer is easily arrived at, where there is a well defined mass distinctly separated from the neighboring parts. It is very different, however, when the contour is not distinguishable, and palpation is fruitless on account of tenderness and the tension of the abdominal walls. Here there may be a cyst, but by no means necessarily, for there are two conditions in particular which on superficial examination so resemble a cyst that they are not rarely taken for it, viz., tympanitis and ascites. The presence of tympanitis is proved by the absence of fluctuation and the results of percussion, which will give resonance everywhere in place of the dulness which any fluid collection, whether free or encysted, would cause. But beyond this we have sovereign means of diagnosis by which the conditions of things may be demonstrated to the eye, in chloroform narcosis, as recommended by Simpson. In this state the muscles relax, the abdomen collapses, so that deep palpation becomes possible. The same result may be more quickly reached by placing the patient on her back, with knees drawn up, and telling her to breathe naturally. The two hands, laid flat on the abdomen, may then be pressed firmly towards the spine. The walls yielding a little with each expiration, what is gained must be retained through the pause and the next inspiration. After several repetitions of this manœuvre, all opposition is overcome, and the hand can thoroughly palpate the abdominal and pelvic cavities through the now flaccid walls. Masses of fat have occasionally been taken for ovarian tumours, especially at the climacteric age. Such masses are elastic, with indefinite outline, and they are dull on percussion. Repeated bimanual examination of the internal genital organs, deep percussion after proper emptying of the intestine,

attention to the presence of a general development of fat rarely present in cases of abnormal growths, the possibility of lifting the curtain of fat from the subjacent parts, the comparative thinness of the inguinal and lumbar region where the fat is always less abundant, will usually suffice to make these cases clear.

The mistaking of ascites for cyst is possible only when fluctuation has shown the presence of fluid, and the distinction is easy when the filled and tense sac can be grasped and moved backwards and forwards under the abnormal walls; and conversely when the fluid, being nowhere sharply bounded, can be felt to slop about in its lower portions, and to change its level with every position of the patient. Difficulty occurs only when the collection has become extensive. In ascites the abdomen is equally prominent on the two sides; the lumbar regions are distended. the umbilical relatively flat, while the umbilicus itself is frequently prominent. With cyst, on the other hand, the abdomen is more conical in form, or at least cask-shaped; the umbilicus is relatively higher, and is not unduly prominent; not unfrequently the distention of the abdomen is unequal, one side being more prominent than another. There is nothing distinctive in enlargement of the veins. Œdema of the lower extremities, though more frequent in ascites, is a symptom of no real diagnostic value. The most important distinctions are afforded by palpation and percussion. In ascites the fluid gravitates in every position towards the most dependent part, and the area of dulness on the percussion changes with the position of the patient; whilst with encysted fluid the territories of resonance and dulness remain absolutely or approximating the same, no matter what position the woman takes up. In the dorsal decubitus, then, supposing the fluid to be free, the lumbar region will be dull and the umbilicus resonant, from the bowels floating on the surface of the fluid; and the converse will be true in the case of the cyst, since those cysts which rise above the brim of the pelvis lie against the anterior abdominal wall, crowding the intestines upwards and backwards. Still there are various points which may easily deceive. First, it is by no means unfrequent in ascites to find the right iliac and even lumbar region tympanitic, on account of the presence of the cæcum, which is often greatly distended with gas, and is confined in its position by a short mesentery. Again, we now and then find a fold of intestine lying in front of the lower anterior border of the tumour, especially when it is narrow below; and this

causes a dull tympanitic tone in the hypogastrium. Fluctuation may under favorable circumstances be very distinct in a cyst, or in fat people may be indistinct in ascites. Here a point of diagnosis may be made use of, to which the late Professor Breslau, of Zurich, first called attention, viz.: in a cyst, fluctuation ceases at a point where percussion becomes tympanitic (lumbar and epigastric regions), the sac wall affording a complete separation between them; but if the fluid is free in the cavity, if it surrounds the intestines as in ascites, the fluctuation will be felt, even in parts where the intestines gives a tympanitic sound. In great distension of the abdomen, either by ascites or by a cyst, all these signs may fail, and puncture can alone reveal the truth. Dr. Spiegelberg places the greatest reliance on exploratory puncture as a means of diagnosis in difficult cases. The contents of ovarian cysts vary from a watery, clear, yellowish fluid, to a tough colloid, stringy, dirty brown, or yellowish-green mass, containing mucin, albumen, and paralbumen, and in addition *cylinder epithelium* in various states of change, debris of cells, crystals of cholesterin, and now and then red blood-corpuscles and pigment granules. Ascitic fluid is always thin and comparatively clear, is poor in solid constituents, and as a rule deposits a copious delicate coagulum of fibrine. In addition it contains the endothelium of the peritoneum, and wandering cells derived from the latter.

If all these means fail in enabling a diagnosis to be made, Simon's plan must be adopted, which consists in introducing the half or the whole hand into the rectum, though it should be explained to the patient that she must be deeply narcotised, and that there will be some slight lacerations of the anus; that she will have to keep quiet for some days, and that she may have trouble in defæcation for ten or twelve days. Finally an exploratory incision may be made after carefully emptying the bladder and rectum. (Translation of No. 55 of the *Klinische Vortrage*, by L. Wheeler, in the *American Journal of Obstetrics*, vol. vi. No. 3, 1873.)

ACCORDING to the *Berliner Klinische Wochenschrift*, November 24th, there is only about one-half the usual number of students at the various clinics of the city. The journal quoted attributes this falling off chiefly to the very greatly increased cost of living in Berlin.

The Etiology and Therapeutics of Cancer Uteri.

Dr. Edward Martin, from observations made in the Berlin Gynæcological clinic, found that in 87 out of 93 post-mortem examinations the cancer proceeded from the vaginal or cervical portions of the uterus, and was only in six cases limited to the body of the uterus. Examinations made during life frequently demonstrated that the origin of the new formation occurred in the fold of the posterior vaginal arch, close to the neck of the uterus, in the form of small knots and granulations. In three cases the origin of the cancer appeared in the form of small red granulated condyloma, like flat out-growths at the border of the anterior or posterior lip of the os. In one of these cases he recommended the patient to have the part excised, but she delayed too long, and died from fully developed cancer uteri. In the two other cases he removed the diseased part with the ecraseur, and then applied Vienna paste freely; both these patients recovered completely. Microscopical examination of the tumours showed that they were of cancerous nature. The post-mortem examination showed that in many cases secondary cancerous deposits had taken place in the liver, pleura, peritoneum, lungs, kidneys, thyroid gland, bones, stomach, and brain. Hereditary influence does *not*, he thinks, play so important a part as is commonly attributed to it in the development of cancer. He only obtained certain evidence of cancer in the family in 13 out of 65 cases. He is not able to corroborate the statement made by certain French writers that early menstruation predisposes to cancer, nor does he find it true that very frequent delivery favors its occurrence. He thinks however, there can be no doubt that intercourse with men suffering with syphilis or its consequences has a tendency to produce it. Widows were often the victims of it, though their husbands may not have shown other signs of syphilis or gonorrhœa than stricture; and not unfrequently the cancer developed on second marriage. Cancer is well known to be a disease more common in great towns than in small, or in the open country. In reference to treatment, it is important to distinguish between cancer uteri and the granular erosion of endometritis colli, as well as certain chronic inflammations of the uterus after abortion, in which the vaginal wall is thickened, infiltrated, dense, and the lips adherent to one another. In these conditions, attention and proper treatment by cauterization, etc., may often bring about a cure. In true cancer uteri removal

can only produce a cure when the growth is very small and limited to one lip. The section must take place through healthy parts, and after several days' delay the wound must be freely touched with Vienna paste. Recently the use of the knife, scissors guillotine, and of the ecraseur, with the use of the sharp spoon, have been much vaunted, but it frequently returns after such operations, as it does after the application of the actual cautery, the gas-burner, or the galvano-caustic instrument. The destruction of the growth by chemical means, such as caustic potash, Vienna paste, hydrochloric acid, or chloride of zinc, subdues for a time the hæmorrhages and the pain, but do not prevent relapses. Injections of nitrate of silver or bromine into the tumour are useless. In regard to palliative treatment, the watery mucous secretions are best treated by injections of solutions of sulphate of alum or copper; against hæmorrhage, injections of cold water with solution of tannin, or with diluted liquor ferri may be employed, or tannin in powder may be scattered over it, or aqua creasoti thrown in, or plunging with lint dipped in solution of tannin used; and when there is much stench, creasote-water, permanganate of potash in solution, and chlorine may be applied. Chlorate of potash, in solutions containing one part in 16, is very serviceable. To relieve the pain, morphia or opium or chloral must be given. A not unfrequent complication, pydronephrosis of one or both sides, causing considerable diminution in the flow of urine, and secondary complications, he treats with small doses of iodide of potassium. In thromboses of the femoral vein, he applies cloths wetted with lead lotion and woolen covering. Peritonitis he treats with cold or hot poultices. (*Berliner Wochenschrift*, 28, 1873, and *Der Praktische Artz*, No. 10, 1873.)

The Cause of Similarity in Twins.

Dr. J. F. Bird, of Philadelphia, writes: It has long been my purpose to call the attention of physiologists and medical practitioners to the consideration of the probable causes of the fac-simile representation of twins. It is a question of considerable interest, that twins should so frequently be so much alike that even their parents can scarcely know the one from the other, whilst other persons cannot at all determine which is "*Minnie*" and which is "*Bessie*." In

my experience, and that extends to a number of well-marked cases during a period of over thirty years, I have invariably found that when twins are contained in the same sac and sustained by the same placenta, they have always had a slavish resemblance to each other; whilst those contained in different sacs and sustained by different placentæ are as unlike as children born of the same parents at different periods, however remote. This hypothesis is sustained, not only by actual, positive and repeated observation, but by inquiries made of other observers. In one family there are two cases of twins. The first pair were contained in the same sac of waters and are exactly alike; the other pair were delivered from different sacs and are no more alike than are the other children. I delivered a case also of triplets. Each child was in a separate sac and neither resembled the other particularly. Let these observations go to the curious or speculative members of the profession for what they are worth. I am satisfied with the theory and believe that close observation will establish it beyond contradiction.—*Medical Record.*

THE INFLUENCE OF POSTURE ON "PRESYSTOLIC" CARDIAC MURMURS.—The influence of posture in altering or removing cardiac murmurs, forms the subject of a valuable paper by W. R. Gowers, M. D., in *The Practitioner* for December, 1873. Dr. Gowers states that several cases have come under his notice in which, after a careful and skilled examination in the erect posture, a heart has been declared free from murmur, when, had the patient been made to lie down, a bruit would have been heard, which could not have been overlooked. He believes that, in most instances the murmur which precedes the first sound, and is commonly regarded as characteristic of mitral obstruction, is both louder and longer in the recumbent than in the erect posture, and that in many instances, more frequently than in the case of any other cardiac murmur due to an organic cause, it may be heard in one posture and not in another—may be loud when the patient is lying down, and inaudible when he is standing up.—*Boston Medical and Surgical Journal.*

ANGER begins with folly and ends with repentance.

Editorial.

OUR HEALTH RESORTS.

Paso de Robles Hot Springs.

Physical indisposition compelled us, a few weeks ago, to seek a change of climate and scenery, and we turned our face towards the hot springs of San Luis Obispo County, of which we had heard much, but which we had never visited. These springs may be approached from San Francisco by either overland or sea travel, being in the one case twenty-four hours and in the other forty-five or fifty from San Francisco.

The springs are situated, as their name implies, in a "pass" of the mountains, and immediately on the banks of the Salinas River. The ranch on which they are located is thickly studded with the most beautiful oaks, and the scenery surrounding, if not grand, is exceeding picturesque and beautiful.

The buildings are so located as to be convenient to the principal or main spring—the plunge bath; whilst the mud bath is some two miles distant over a charming road for driving or riding horseback.

The hotel is admirably conducted and presided over by Messrs. James & Blackburn, or their manager, Mr. Dunn, than whom no gentlemen can be found more genial in disposition and indefatigable in their exertions to secure to the guests of the establishment every comfort and enjoyment.

The resident physician, Dr. Aylette, is kind, attentive and efficient as the professional advisor of the place, being always pleasant and encouraging in his manner towards the sick, which at once secures their confidence and affection.

The village (if such it can be called) consists of the hotel some dozen small cottages, besides two larger, one of the capacity of twenty or more persons; a large store, in

which anything from a nail to a mowing machine, or from a yard of tape to a silk dress, may be had, presided over by its agreeable proprietors; a stage office, telegraph office, United States postoffice, stable (livery), laundry and bath-houses, arranged for both males and females; to all of which may be added the the new dining-room building, intended for the use of tourists or families who are not invalids.

Thus it will be seen that much has been accomplished towards making this a most desirable place of resort, whether for the nabob or the sick man.

During our stay, which was delightfully passed, we had an opportunity of inquiring into the thermal as well as the medicinal qualities of the water, and we are free to state that, whilst the temperature, either for bathing or drinking, is in no wise disagreeable, the various salts held in solution are such as to make the waters of this spring all that could be desired in the treatment of various diseases both of the skin and blood.

We herewith, for the information of our readers who have had neither the opportunity of visiting the place nor of seeing any account of its waters, append an analysis and briefly notice the affections in the treatment of which it has been found serviceable. :

Temperature, 110° Fahrenheit.

One Imperial Gallon contains—

Free Carbonic-Acid Gas	10.50
Sulphureted Hydrogen Gas	4.55
Sulphate of Lime	3.21
Sulphate of Potassa	.88
Sulphate of Soda	7.85
Per-Oxide of Iron	.36
Alumina	.22
Silica	.44
Bi-Carbonate of Magnesia	.92
Bi-Carbonate of Soda	50.74
Chloride of Sodium—Common Salt	27.18
Iodine and Bromides, traces only	
Organic Matter	1.64
Total Solid Contents per Gallon	93.44

MEDICAL SPRINGS, PASO DE ROBLES.

Temperature, 122° Fahrenheit.

One Imperial Gallon contains—

Sulphureted Hydrogen Gas	3.28
Carbonic-Acid Gas	47.84
Sulphate of Lime	17.90
Sulphate of Potassa, traces	
Sulphate of Soda	41,11
Silica	1.11
Carbonate of Magnesia	3.10
Carbonate of Soda	5.21
Chloride of Sodium	96.48
Organic Matter	3.47

There are also several cold springs on the place, one of which is decidedly chalybeate ; whilst the temperature of the hottest spring is 140°.

From a careful examination of these waters and their effects, we arrived at the conclusion that they are distinctly alterative, laxative and diuretic, and consequently are invaluable in the treatment of syphilis, rheumatism, mercurial poison and the various diseases of the skin. We have witnessed some marvelous results in cases of secondary syphilis and rheumatism, and have reason to believe that with proper attention to diet, dyspepsia may be successfully treated through the use of these waters.

The laxative effect of these waters is not so great as many other celebrated springs, which, in our judgment, is a recommendation; whilst the alterative, diuretic and tonic effects are more marked than in the use of almost any of the foreign spring waters of celebrity.

Taking these facts and figures into consideration, together with the superior accommodations offered and kind attention extended, we feel justified in saying that the Paso de Robles Springs present at this time greater attractions to invalids (suffering from the diseases to which the waters are adapted) and the tourist than any similar place of resort in the United States ; and therefore we earnestly call the attention of our readers to the facts so briefly and imperfectly stated, and ask that they shall be well considered.

Sycophancy and the Guillotine Again.

That astute body, the "Board of Health" has undergone another change. One more member has died through the "Statute of Limitation" of office, and the executive of the State again has exercised that *right* which is vested in him, to do as he pleases in appointing one to fill the vacancy.

Without discussing the merits of the appointment or appointee, we will say that "consistency is a jewel" possessed by but few, and when the old members (excepting one) and the NEW member turned their eyes up and declared that the head of Dr. Mears had to drop, but not through political reason, they (as will be seen by their after action) stultified themselves, for after the decapitation they passed complimentary resolutions commending his efficiency as an officer. He was efficient and was laboring under *no* political disability, and the lame reason offered for the act was that he had held the position of Quarantine Officer long enough.

It is said that a poor excuse is better than none, but we are of opinion that *no* excuse should have been given unless it had been a truthful one, which we declare this one to have not been. Why is it that men will forget that they are men and act as with fear of offending *some* one?

A certain correspondence passed between the new member of this Board and a leading merchant, the one requesting that Dr. Mears be retained, but the "war whoop" was raised by the member. Dr. Mears had not worn the "blue" during the late unpleasantness and for this reason off must come his head. *We* might add that the same argument should apply to the member.

Will this excessively loyal gentleman never allow the "war cry" to die? will he with others insist upon fighting this cruel war over again annually, or will he not be admonished; does he not know that it is finished, and will he not permit us to admonish him to the effect that no good results from the constant harping on the war? We

ought now at least to forget that we had ever been divided; we ought to be once more brothers, and if either of us have erred let us exercise that Christian spirit of forgiveness which becomes an enlightened people.

In the official acts of our Board in future when reasons for action are required let each member recall for his guidance the story of George Washington and the cherry tree.

Let such of the Board as are exquisitely loyal, remember that the war is over, and that the following announcement has been made through the daily press:

NEW YORK, May 5th.

At a meeting of the Posts of the Grand Army of the Republic here to-night, it was agreed not to discriminate between Union and Confederate soldiers' graves on Decoration Day.

California State Medical Society.

The fourth session of the State Society was held on the 15th and 16th of April. A fair representation of the profession was present. The Annual Address of the President appeared in our May number. Many very creditable papers were read and the session was conducted and concluded in harmony. Dr. Brown of the Navy was elected President for the ensuing year, which is we believe the first instance, where a member of the medical corps of the United States Navy has been selected to preside over the deliberations of a State Society.

Dr. Brown has for many years, with some short intermissions, been attached to the Navy Yard at Mare Island and has endeared himself to the whole profession on the Coast through his urbanity of manner and uniform zeal in the profession of which he is an honored member.

The meeting was concluded with a banquet at the Lick House, at which Dr. R. Beverly Cole presided in behalf of the Committee of Arrangements and in the absence of Dr. John F. Morse, who was prevented from being present in consequence of sickness.

The usual toasts were offered by the Chair, which were responded to in good taste by those called upon, and at a late hour the company separated with good feeling towards each other and the world at large.

A New and Valuable California Invention.

Mrs. Ella N. Gaillard of this city, a sister of Dr. Charles F. Neilson, formerly of the U. S. Army, has recently invented and patented the most ingenious and perfect instrument in the shape of a needle, extant.

It consists of a straight (but may be made curved) needle, the head of which is drilled longitudinally, with a screw thread made along the drilled portion, so that when silk or cotton is used it is but necessary to wax the end of the thread and screw it by a rotary motion of the thumb and index finger into the opening made by the drill. When wire is used by the surgeon it is but necessary to introduce the extremity of the suture into the same apparatus and with the same motion fix it firmly. Of all little things, this is the greatest in point of utility and general usefulness that it has ever been our privilege to examine.

Equally useful in the sewing room of our families and the surgery of practitioners; applicable to every conceivable operation in surgery in which a needle is called into play and yet so simple in its plan, construction and use, as to lead us to inquire of ourselves why we had not thought of it before.

The lucky inventress of this invaluable little instrument is likely to realize a fortune and certainly deserves one from the sale of it.

The inventor of a simple curve in the needle used with sewing machines, realized, it is said, a fortune of half a million dollars from his invention, and yet the sphere of usefulness of the "sewing machine needle" is limited when compared with that of this new needle. The invention, emanating as it does from a lady, speaks strongly in

behalf of the capacity and genius of woman, and we opine will stimulate others of her sex to try themselves in the same or some similar direction. Try it again, Madame Gaillard! though you have given us an exhibition of your steel and sharpness, yet we can stand a little more of like utility.

The name by which the invention is known is the "Eureka Needle," and we understand from its fair author that within the next month they will be on sale in the city.

It is *needless* for us to add more than to recommend the profession to at once give it a trial.

WE notice that a contemporary, the *Pacific Medical and Surgical Journal*, has concluded that the LANCET is gaining ground, and, in the hope of staying its progress, reduces its (the *Journal's*) price from *five* to *three* dollars a year. This is a vain hope in which our friend indulges: the LANCET will continue to grow in spite of competition.

We regret that the editors of the *Pacific Journal* should be called upon to sustain so great a loss as must result from this reduction of *forty per cent.*, yet we cannot help it, and can only extend our sympathy in the extremity to which they are driven.

We are glad, however, to have our influence recognized, as exemplified in this change of base.

WE must apologize to our readers for the meagreness of the Editorial Department of this number of the *Lancet*. Sickness and a pressure of original matter must serve as our excuse.

The truth is that the *Lancet* is growing so rapidly in favor that much matter of interest has each month to be carried over, yet we court this favor and promise that all articles of merit shall be attended to, and invite our brethren to send in their contributions, with the assurance that

though they may not find room in the issue of the month in which they are sent, yet the following issues will produce them.

Hence we say to such as have industry—and all should have—write up your cases of interest and send them forward.

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, February, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	300	53	39	14	2	16	4	S. F. B'd of Health.
Sacramento	35	6	5	3	0	1	2	Sac. B'd of Health.
Petaluma	6	0	0	0	0	1	1	Dr. G. W. Graves.
Dixon	...	..	..	..	.	..	.	Dr. A. H. Pratt.
Stockton	6	4	1	0	0	0	0	Stockton B'd Health.
Marysville	7	1	3	0	0	0	0	Dr. A. B. Caldwell.
Placerville	2	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	3	0	0	1	0	0	0	Dr. T. C. Stockton.
Oroville	4	0	1	1	0	0	1	Dr. J. M. Vance.
Oakland	...	..	..	..	.	..	.	Dr. T. H. Pinkerton.
Los Angeles	21	0	1	0	0	2	2	Dr. H. S. Orme.
Truckee	1	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	1	0	1	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	...	..	..	..	.	..	.	Dr. M. B. Pond.
Watsonville	...	..	..	..	.	..	.	Dr. C. E. Cleveland.
Folsom	...	..	..	..	.	..	.	Dr. S. Lyons.
Santa Cruz	0	0	0	0	0	0	0	Dr. C. L. Anderson.
Suisun, Fairfield	...	..	..	..	.	..	..	Dr. S. D. Campbell.
Colusa	7	1	0	1	0	0	1	Dr. Luke Robinson.
Trinity County	...	..	..	..	.	..	..	Dr. J. C. Montague.
Santa Barbara	14	5	1	0	0	0	0	Dr. C. B. Bates.
Redwood City	2	0	0	0	0	0	0	Dr. Kirkpatrick.
San Andreas	2	0	0	0	0	0	0	Dr. C. B. Robertson.
Auburn	...	..	..	..	.	..	.	Dr. A. S. Dubois.
Tulare County	4	0	2	0	0	0	1	Dr. M. Baker.
Siskiyou County	0	0	0	0	0	0	0	Dr. Daniel Rearn.
Ione City	...	..	..	..	.	..	..	County Recorder.
Placer County	...	..	..	..	.	..	..	County Recorder.
Susanville	1	0	0	0	0	0	0	Dr. J. J. Sawyer.

Remarks.—We have to remind our correspondents of the importance of being more punctual with their contributions. The frequent breaks in these reports, while detracting from their symmetry and immediate value, necessitate considerable trouble, in supplying the omissions, when making up our annual tables. We also beg leave to call attention to the suggestions made in the March number of this journal, respecting the sickness rates. A little careful recording of cases in the smaller towns would not only enable us to ascertain the relative mortality of any given disease, but would also afford us the means of estimating, with a near approach to certainty, the proportion of persons constantly sick throughout the State. We will likewise thankfully receive information of any kind relating to sanitary matters or sickness from every source.

THOMAS M. LOGAN,
Permanent Secretary State Board of Health.

Filth without Fever.

Dr. Dudgeon, who has had abundant opportunities for observing the sanitary condition of Pekin, China, in connection with the history of cholera among the Chinese, reports as follows concerning that city:

"Dr. Dudgeon refers to the filthy condition of that city—a condition of which, he says, people in the West can form no notion, for the smells defy description—in regard to the wonderful immunity of the inhabitants from fevers. If bad smells alone created fevers, there ought to be no immunity from these diseases. The police and scavengers are among the healthiest and most robust of the population, and the beggars who congregate in the very centers of pollution, contesting with the dogs, priority of claim to the refuse of the dunghills, survive and flourish, and most of them—at least the strictly professional ones—look fat and sleek. The sanitary legislation of Western cities, he says, is based upon the one idea that disagreeable and offensive odors are necessarily deleterious to health. The condition and mortality of Pekin, I think, would seem

rather to explode this belief. The removal of night soil may be considered most destructive to health; yet here, there being no system for carrying off sewerage or scouring drains, the entire night-soil of the city is transported during the day, through the most crowded and sometimes narrow thoroughfares. We are obliged to pass certain localities at all times with closed nostrils, while hundreds of people continually live in and around and above these open cesspools, and yet manage to look well and healthy. Many diseases prevail here, as in the West, without the agency of this reputed cause, noxious odors; and the causes exist at all times here without producing such diseases."—*Lancet—Cincinnati Medical News.*

Book Reviews.

A MANUAL OF TOXICOLOGY: Including the Consideration of the Nature, Property, Effects and Means of Detection of Poisons, more especially in their Medico-Legal Relations. By John J. Reese, M, D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania, etc., etc., etc. Philadelphia: J. B. Lippincott & Co.; San Francisco: A. Roman & Co.

The work before us is a complete treatise on toxicology, a science upon which much has in late years been written, but which is very indifferently studied by either student or practitioner.

The chapters on "Post-Mortem Imbibition of Poisons" and on the "Duties and Privileges of Medical Experts" treat of very important subjects, which are admirably handled by the author.

Perhaps no more important questions to the profession could have engaged his attention or so deserve perusal.

The reputation of Dr. Reese as a toxicologist and teacher in this department would necessarily secure for the book a large sale, but the intrinsic merit of the book is to be found in its pages, the matter of which is so agreeably presented as to relieve it of that dryness that so generally characterizes books of the kind.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION AT THE TWENTY-FIRST ANNUAL MEETING, HELD IN RICHMOND, VIRGINIA, SEPTEMBER, 1873.

The transactions of this society comes to us in a shape that is at once noticeable and gives evidence of the industry that characterizes its members—a volume of some seven hundred and odd pages, filled with interesting and important contributions to the art of pharmacy.

We, however, regret to observe that one of the voluntary articles, from the pen of one Benjamin Lillard, of Nashville, is voted a disquisition on "Homœopathic Pharmacy." It is evidently written without either consideration or care, and is distinguished, if for anything, for stupidity. Such an article should never have been permitted to appear in what, as a whole, may be considered a valuable book.

Several contributions are from the pen of Squibb, well known throughout the country as a devotee to the science and art of pharmacy; whilst Marsch and many other names equally well known have materially aided in making up the intrinsically valuable matter of the volume.

ANNUAL REPORT OF THE SUPERVISING SURGEON OF THE MARINE-HOSPITAL SERVICE OF THE UNITED STATES, FOR THE FISCAL YEAR 1873.

This report is presented in a neat shape, being a bound volume of one hundred and fifty pages, but contains little of interest save a case of "Double Diaphragmatic Hernia," reported by Dr. Muior, of Port Townsend, W. T. The remainder of the book is made up principally of an account of yellow fever, and what appears to us clap trap nonsense pertaining to the construction of Marine Hospitals.

The author evidently has "pavilion" on the brain, and gives very little proof of having enjoyed much observation in the direction of hospitals; yet perhaps he is in a measure excusable, since the mass of self-made, and poorly made at that, surgeons employed during the late war are of the opinion that nothing is admissible in the plans of hospitals but the pavilion.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR JUNE, 1874.

Original Communications.

A Case of Talipes Equinus following a Neglected Sprain of the Left Ankle—Section of the Tendo Achillis—Complete Recovery from the Deformity.

BY CHARLES B. BRIGHAM, M.D., HARV., SAN FRANCISCO.

T. M. æt. 41—In the Fall of 1870, the patient, in walking up stairs, slipped and wrenched his left foot. He experienced considerable pain on each side of the ankle, but there was no swelling of the part. Instead of remaining at rest for a few days, he continued his work, and as Winter came on, he walked long distances in the snow. In addition to pain a swelling appeared round the ankle. Some eight months after the injury, the patient noticed that he walked on the toes of the injured foot, rather than upon the entire sole. The heel would not touch the ground without some difficulty; so a thickness of leather was added to the boot-heel. At the end of a year he was obliged to add over an inch to this thickness. Becoming

alarmed at the serious impediment to his walking, he frictioned the foot with oil, and gave it prolonged cold baths. This treatment relieved the pain, but the deformity was steadily increasing. He consulted a physician, who put a seton in front of the ankle, and this style of treatment was continued several months without material benefit. He was obliged to add to the boot-heel to such an extent that, at the expiration of three years, the left heel was raised from the ground a distance of three and a half inches. Upon examination, it was found impossible to bring the foot to its natural position, even while the patient was under chloroform. On stretching the foot and pressing on the tendo achillis, there was an acute pain felt along the dorsum of the foot and at the point of pressure. The movement in the ankle-joint was such as to warrant the supposition that the joint was healthy. In the tarsus, however, there was a general thickening of the bones, such as might occur after a dry arthritis of that region. The operation of dividing the tendo achillis was decided upon and performed on the 19th of March, 1874, Dr. W. T. Wyeth, assisting. The knife was inserted from within outwards, and from below upwards; a bit of adhesive plaster was placed over the puncture; the foot came readily into place, once the tendon was divided. It was then restored to its former position and a Sayre's splint applied. This splint is made as follows: "Cut a thin board (the top of a cigar box answers very well) in the shape of the sole of the foot which is to be dressed, only a little longer and square at the toe. Then take a piece of strong moleskin adhesive plaster as wide as the board and long enough to cover both sides of the same and to reach some inches above the knee. Apply the adhesive side of the plaster to the board, commencing at the anterior extremity of the upper surface passing backward over the posterior extremity of the board and under the same to its anterior extremity; the remainder of the strip is subsequently to be applied to the anterior surface of the leg. The foot is then placed on the board A and secured at the heel by a

strip of the same adhesive plaster, B passed over the ankle and around the heel part of the board and additionally secured by a well-adjusted roller which also extends above the ankle. The foot is now brought to its natural position and the adhesive plaster C is firmly drawn up and secured to the leg by a continuation of the roller. The superfluous extremity is to be reversed, bringing its adhesive surface outward and the roller carried back over it will be more firmly retained in position."* The patient experienced little, if any, pain with this splint. It was decided to perform the extension gradually, and day by day the strap C was tightened a little, until at the end of three weeks the foot was in a good position and touched the ground at every part. One month after the operation, the splint was removed and the patient was directed to walk with crutches. A steady improvement in the strength and motion of the foot was the result of this exercise. The leg which, before the operation, was somewhat smaller than the right, now regained its size, and at the end of the second month after the operation, the patient could walk easily and well without any assistance. Malgaigne, in his Lecons D'Orthopédic, records a similar case treated by M. Guyon by an apparatus constantly applied, without tenotomy; but he agrees that by this means the cure is never enduring, and that as soon as the bandage is removed, the heel will gradually slip back into its old mal-position. Repose makes no difference in the deformity; walking only increases it. Baths are of no ultimate service. We may, indeed, have a relapse even after the division of the tendon, but this operation offers the best chances of successful treatment.

A pow-wow doctress in Nazareth, Pennsylvania, recently undertook to bleed a lady for an epileptic fit. Unfortunately she opened an artery instead of a vein and the patient died before assistance could be obtained.—*Atlanta Medical and Surgical Journal.*

*Practical Manual on the Treatment of Club Foot. By Lewis A. Sayre—pp. 38 and 39.

On the Communication of Syphilis by Vaccination.

BY A. P. HAYNE, M. D., SAN FRANCISCO.

The attention of the medical world has again been recently called to the danger of an indiscriminate and careless use of the protective power of vaccine lymph, by the startling report of Dr. Hutchinson, read before the Royal Medical and Chirurgical Society of London, in which he gives a history of four series of cases of Vaccino-Syphilis, occurring under his own observation within the last two years.

That there should be a possibility of such an unfortunate occurrence, would of itself be sufficient to awaken inquiry and excite discussion as to the prevention of so deplorable a result; and it is therefore, with no misgivings as to the untold value of vaccination as a sure preventive for one of the most loathsome and dangerous diseases to which humanity is liable, that we have thought a brief review of Dr. Hutchinson's report and a few practical suggestions of our own, might not be without interest at the present time.

The cases reported by Dr. Hutchinson extend over a period, of a little less than three years, viz : from 1870 to the beginning of 1873.

In the first series two out of twelve (vaccinated from the same child) escape Syphilitic infection; in the second, out of twenty-six vaccinated, more than one-half escaped; while in the third and fourth, only one out of twelve vaccinated from each vaccinifer, is known to have been syphilised.

In view of this startling result, no wonder the editor of the London *Lancet* exclaims that these facts, "possess a great but melancholy interest, and mark a new and very considerable advance towards the proof that Syphilis may be inoculated during the process of vaccination."

That there could be no question as to the true nature of the infection, as observed in the cases reported, was established beyond peradventure, not only by the development of secondary symptoms, but by the successful results of a mercurial treatment.

What then, asks Dr. Hutchinson, are we to infer from these facts? Why does it affect some and not others vaccinated from the same tainted source? And he answers; we must believe, that the specific poison of Syphilis is either not contained in vaccine lymph at all, or is not equally diffused through it.

Another, and no less important question here presents itself in this investigation, viz: is it possible to convey Syphilis with or without the production of the vaccine vesicle? From a close and careful scrutiny of the cases reported we are enabled to answer these questions in a satisfactory manner; as we shall now propose to show.

In the first place, the cases reported by Dr. Hutchinson, establish beyond any reasonable doubt, that those who were vaccinated from the pure lymph as it escaped from the vesicle, were not affected with Syphilis; and secondly, that in those who were affected, the draining of the pustule or vesicle had been used, mixed (as Dr. Hutchinson thinks) with more or less colorless exudation of blood.

Here, then, we have an important fact, and one from which we may draw much practical good—viz: that it is always dangerous to vaccinate more than a certain number of persons from one vesicle—or in other words, never to use the draining or weeping of a pustule.

This we consider the practical lesson taught by the cases reported, and the first step in the direction of our future safety.

Another question, however, here presents itself, and one which is fraught with more embarrassment as regards its practical solution, viz: supposing both viruses to be implanted at the same time, what will be the result?

The answer to this question, according to the report already referred to, is easier than the removal of the evil entailed. If, says Dr. Hutchinson, the subject be susceptible of vaccination, the vesicle goes through the usual phases and heals, and nothing more happens, until the end of a month, when the scar indurates and a chancre forms.

In some few cases, however, he adds, the "vaccination

sore never heals at all," and in these cases, very often, the scab often obscures the true character of the chancre.

In these cases of course, the harm has already been done, and nothing remains, but to treat the inoculated disease, as we would any case in which it had been contracted in the natural manner.

It may be well here before proceeding farther, to describe the Vaccino-chancre, as seen by Dr. Hutchinson, as it differs somewhat from that of daily observation. "It begins, then, as a little, red, firm, glossy tubercle, which gradually increases in size and becomes harder. In about a fortnight it ulcerates, the sore giving off very little discharge, with a hard base and edges."

If no constitutional treatment be resorted to, this sore may remain open for months, and in one instance, at last assumed a phagedenic appearance, while in others there was a good deal of inflammatory effusion at the base, and much prevalent secretion on the surface.

The foregoing is a brief outline of the principal points of interest contained in the report of Dr. Hutchinson's cases, and although they elicited considerable discussion and gave rise to numerous attempts to explain them, were generally acknowledged as full of interest and worthy of careful future observation and experiment.

There is, however, one point which was apparently lost sight of, and as it appears to us to constitute a most important one, in the discussion of this subject, we propose to offer a few remarks upon it, before bringing this paper to a conclusion.

We allude to the general practice of using the scab in vaccination.

If, as seems to have been generally admitted, there is not only a possibility, but an absolute certainty, that syphilis may be communicated by using the draining of a vaccine pustule on the arm of a child affected with hereditary taint, we certainly cannot be too careful in the mode and manner of using so potent a benefit for the protection of the rising generation as well as testing the security of those who apply for revaccinnation.

It seems to us, therefore, that the adoption of some precautionary rules, would not only guard against accidents of this kind, but commend themselves to the consideration of every physician.

For the accomplishment of this end, we would suggest the following, viz.: *Firstly*, In all cases to vaccinate from the lymph of a healthy vesicle in preference to any other method; *Secondly*, In no case to use such lymph after it has ceased to exude freely; *Thirdly*, In vaccinating with the scab, to use only those which have been suffered to mature and drop off without having been previously opened at all; and *Fourthly*, Never to use a scab which has formed after the lymph has been drawn from the pustule. To these might be added the additional precaution of renewing the vaccine from the heifer from time to time, especially during a small pox epidemic.

There can be no question, from the cases reported, that syphilis when communicated by vaccination is transmitted through the agency of the blood or serum globules which exude from the draining of an emptied vaccine pustule. Hence the great risk we run in using a scab which has matured after the lymph has been drawn off, and which is in a great measure composed of these dangerous elements. On the other hand, in using one which has not been opened or tampered with, we have pure lymph only in a solid form, and no danger can be apprehended in using it.

Whether there be any force in the theory of delaying vaccination, until a child should have reached six months of age, or if not using the lymph from the arm of first born children, until subsequent issue shall have proved the absence of heriditary taint, we are not prepared to say; but in regard to the safety of using lymph only, or a scab from an unopened pustule, our convictions are positive, and we submit them to the consideration of the profession, with a view of drawing more earnest attention to this important subject.

It is a matter of vital interest, that the public mind should be perfectly satisfied not only as to the utility, but

the safety of vaccination; and as long as medical men are careless, or as these terrible consequences sometimes occur, we cannot be too careful or too anxious, lest the great discovery of Jenner be called into question.

As there is no one who is a more firm believer in the absolute protection of vaccinnation, than ourselves, so there is also, no one who would more willingly use his utmost endeavors to render impossible the consequences which the discussion of this subject has elicited.

The protective power of vaccine is too great a boon to be jeopardized by the possibility of a doubt, and it behooves us to render it proof against all suspicion, at least as far as human means and foresight can accomplish such a result.

Extirpation of a Tumor—Recurrence—Second Operation—Secondary Hemorrhage—Ligation of Common Carotid Artery—Paralysis from Wasting of Brain-substance—Death—Autopsy.

BY E. B. ROBERTSON, M.D., SAN ANDREAS.

"Mau Wau, a native of China, aged 45 years, of good constitution, admitted to the Calaveras County Hospital October 24th, 1872, on account of a large tumor situated on the right and frontal aspect of the neck, extending from the clavicle along the side of the trachea and larynx to near the mastoid process of the temporal bone, and overlying a portion of the parotid gland, being crossed by the external jugular vein.

After due attention to the constitutional condition of the patient, I determined to extirpate the tumor, which was accomplished on the 30th day of October, as follows: The patient being placed on an operating table, with head and shoulders slightly elevated, a mixture of ether and chloroform—three parts of the former to one of the latter—was administered, to the extent of complete anæsthesia. An incision was made the length of the tumor, nearly parallel

with, but external to, the internal jugular vein. The flaps being dissected from the tumor, it proved to be of the encysted variety, and consisted of a number of cysts, lying and held together by connective tissue.

Commencing at that portion nearest the clavicle, the tumor was dissected out, partly with the finger-nail, and partly with the handle of the scalpel; the blade being used to divide fibrous bands or attachments. Just above the angle of the jaw, a sort of pedicle was encountered, which appeared to be supplied by several large blood-vessels; to this tissue, I applied a ligature and divided it, completing the removal as before described.

Water dressing was applied and retained by a few turns of the roller bandage. After the ninth day, warm was substituted for the cold water, until the cure was complete.

Ligature dropped off on the eighteenth day.

Tumor weighed nine ounces, and was made up of a number of cysts, ranging from the size of a small marble to that of a turkey's egg. The patient was discharged cured fifty days from the date of his admission to the hospital."

The above is the substance of a paper reported to the California State Medical Society for 1873, and is here reproduced to illustrate the too frequent use of the phrase, 'discharged cured.' Had it said apparently cured, it would have been much nearer correct, as the sequel will show.

On the 3d day of June, 1873, about eight months after the operation above described, the patient was re-admitted; the tumor growing again, chiefly from the peduncle to which the ligature was applied in the former operation.

Owing to the intimate relation of the tumor with the external carotid artery and its numerous branches, I felt some hesitation in any attempt to remove it by the knife, and tried to disperse it with iodine, or rather iodides, both externally and internally, but without effect. Finally, on the 29th of June, I made a second attempt at extirpation, which was an easy matter except at the root, or peduncle, before mentioned, where it was necessary to dissect

it out with a knife, and in doing so, a branch of the external carotid artery was cut, and tied without difficulty. Cold water dressing only applied.

On the eighth day after the operation the ligature dropped off, followed by a terrible hæmorrhage. The Steward, according to instructions, upon discovering the hæmorrhage, placed his finger upon the patulous mouth of the vessel, and sent for me, a half-mile away. On arriving at the bed side, I endeavored to take up the vessel, but found it impracticable.

I finally cut down upon, and ligated the common carotid about its middle. This operation, as I performed it, is fully described in "Gray's Anatomy on the Surgical Anatomy of the Cervical Region." Immediately after tightening the ligature upon the carotid the patient showed symptoms of deep coma, but soon revived.

Water dressing alone was applied and the patient made as comfortable as possible in bed. Wound healed satisfactorily; ligature came away on the fifteenth day.

Two weeks after the last-described operation, there were symptoms of general paralysis, but most marked on the left side. Paralysis increased gradually until the 6th of August, when death closed the scene.

Autopsy twenty-two hours after death. Upon removing the calivarium, the dura mater presented a withered appearance, with several spots preternaturally white, one of them as large as a silver dollar, just over the centre of the right hemisphere. There was a considerable quantity of serum immediately beneath the dura mater. The brain was apparently shrunken. The quantity of serum upon the surface and in the ventricles of the brain measured 3 ounces and 7 drachms. There were distinct softened portions, particularly at the base, mostly on the right side, and confined to the middle lobe, and one as large as an egg toward the outer surface of the right hemisphere."

In the above report I have purposely avoided theory or comment, choosing to give only a plain statement of facts, and leave theory for others who may choose to indulge in it.

Standing Committees of the California State Medical Society for 1874-75.

Practical Medicine—W. R. Cluness, M. D., Chairman; H. A. Dubois, M. D., S. D. Campbell, M. D., J. P. Mooklar, M. D., C. M. Fenn, M. D.

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In Memoriam.

At a regular meeting of the Sacramento Society for Medical Improvement, the following report of the Committee appointed to draft resolutions expressive of the sentiments of the Society upon the occasion of the death of DR. ED. M. CURTIS, was unanimously adopted:

MR. PRESIDENT:—But yesterday, with saddened hearts, we followed to the grave an honored friend and brother, full of years, wearied with the toils of life and ripe for the sickle. Scarcely had the weeds of mourning withered, when another instinct, with the elasticity of youth, and with bright promises for the future, was stricken down by the relentless shaft: and now a third in middle age, a beloved associate, not unexpectedly to himself, but suddenly to us, has gone from among us, and severed another link in that chain of affection which for six years had remained unbroken.

A regular attendant upon the meetings of this Society, the author of some of the most valuable papers, which it has given to the press, an ardent lover of his profession, and a warm-hearted, genial companion, the death of Ed. M. Curtis has left a void in our little circle which we feel that it will be difficult to fill.

As a student of medicine he was a man of rare comprehension and thorough accomplishment; as a practitioner in the specialty to which his later years had been devoted, he was without a superior perhaps without an equal on the Pacific coast.

But not by us alone will his loss be felt. He gained the friendship and esteem of all who knew him, and among the many who sought his counsel and received the benefit of his skill, there are but few to whom the intelligence of his death will not bring sorrow and sadness.

Recognizing his worth to us, to the community and to the profession, and the irreparable loss we have mutually sustained, we, your Committee, respectfully recommend that

this minute, feebly expressive of our regard for our departed friend, be entered upon the records of the Society, published in the daily papers of the city and in the medical press of the State, and a certified copy thereof be sent by the Secretary to the widow of the deceased, and to the Societies of which he was a member.

F. W. HATCH, M. D.,
THOS. M. LOGAN, M. D.,
H. L. NICHOLS, M. D.,

SACRAMENTO, May 19, 1874.

Obituary.

At a regular meeting of the Sacramento Society for Medical Improvement held on the 19th day of May, in the office of Dr. Nixon, the following minute of the death of Dr. T. B. Hatch, one of its members, was read and approved:

Only a few days ago we followed to their last resting-place the remains of a veteran in our ranks ripe with professional honors and ready to be gathered home; and now our ranks are again broken and we mourn the loss by death of T. B. Hatch, one of the youngest members of our Society.

For several years he knew that his health had become impaired, but so suddenly was his young life taken that he scarce had time to utter the cold and silent word "adieu." Not even were his doting parents privileged to witness the last sad struggles of his manly breast, nor his brothers to whisper a fond good bye, nor his loving sister to pour into his ears the sad music of a last farewell.

Although debarred from regularly participating in our deliberations because of his residence in San Francisco, we all know that his heart was ever with us, and that opportunity alone was wanting to render him one of our most active and efficient members.

His contributions to the *Coast Review* and *Medical Record* bear evidence of a mind well-matured, and the flattering notice of them by the ablest critics in and out of our profession betokened for him in the near future a national reputation.

Born in Wisconsin, but reared and educated from his early boyhood in this city, all can bear testimony to his unwavering integrity, his fidelity to purpose, his love of truth and honor, and his utter abhorrence of anything disingenuous.

As a slight token of our regard for our departed brother, your committee request that this minute be spread upon the records of the Society and published in the medical journals of the State, and that a copy of them be transmitted to the relatives of the deceased.

W. R. CLUNESS,
G. G. TYRRELL,
H. W. NELSON.

Surgery.

Notes of Some Surgical Cases.

BY JOHN J. BLACK, M.D., NEWCASTLE, DELAWARE.

FEMORAL HERNIA, AT TIMES SIMULATING STRANGULATION, ACCOMPANIED BY A CLINICAL CURIOSITY.

Saturday. November 29th, 1873, 11 o'clock A. M., I was summoned to see a lady about 60 years of age; she told me she had had a "rupture" in each groin for a number of years. Never had had trouble until this morning, when she was unable to reduce the one on the left side. Had severe umbilical pain, and the tumor was tender. Had worn a double truss "off and on" for a long time. Upon examination, I found a femoral hernia on each side; the right one normal, the left one presenting a tumor, size of a hen's egg, quite tender, and irreducible after the usual manipulation. I then asked my friend, Dr. G. T. Maxwell, to see the case with me. We again tried manipulation without success. Then we etherized the patient, and were still unsuccessful. We introduced the needle of a hypodermic syringe, and drew off a little serous fluid, but do not think the bulk of the tumor diminished much. We next gave a full opiate, and our patient was comfortable for several hours. Did not vomit. Again the tumor did not yield to manipulation, very carefully performed, yet the symptoms of strangulation were not

decided, and we gave her an opiate, and left her until morning. Then I found her with pain about the umbilicus, and vomiting; and then I made up my mind there was strangulation and I would have to cut down on the tumor and liberate it. But, after giving her numerous draughts of water, the stomach quieted, pain ceased, and the symptoms were no longer urgent, the sickness and bilious vomiting having been caused by the opiate. The tenderness increased in the tumor, redness appeared, showing a tendency to suppurate. This state of affairs continued increasing until December 10 following, when I made carefully a valvular incision and liberated a large amount of pus. Immediately on opening the tumor there was an escape of the foulest-smelling gas. I supposed at the time I had unintentionally opened the bowel; but later disclosures have taught me to believe that the foreign body hereafter to be spoken of had penetrated the bowel from within outwardly, and caused the suppuration in the cellular tissue of the abdominal walls, external entirely to the bowel. Poultices were applied for several days, rest enjoined, liquid diet, etc., etc.

One morning, about ten days after this, on visiting her, she showed me a piece of bone, about one and a half inches long, which she had extracted from the opening in the tumor. After this the opening soon healed, and up to this time (April 17, 1874) the hernia has appeared to be "radically cured."

Remarks—My friend Dr. James Tyson, of Philadelphia, kindly presented the bone to Professor Harrison Allen for examination, and he pronounced it to be not human, but a part of the rib of a robust-chested mammal of small size. Prof. Leidy first thought it was a fœtal rib, but after examining it, was satisfied it was not human. I may add here that the patient was a married woman, and had had two children.

This case is interesting, first, as simulating strangulation, which I believe did not occur at any time during its progress; second, the discharge of the foreign body, which must have been swallowed with the food, and have worked its way through the bowel; and third, as exhibiting the hernia as up to date cured by the inflammation developed in the case.

AMPUTATION AT THE SHOULDER-JOINT FOR EXTENSIVE GUNSHOT WOUND OF THE ARM AND SHOULDER.

Friday, October 31st, 1873, I was called down the State

by Dr. Kemp to see, in company with Drs. Dunlop, Worrell, and Fromberger, a young gentleman, 23 years of age, healthy and well-built, who, the evening before, had, whilst returning from a duck-shooting excursion, shot himself accidentally with a full load of heavy duck-shot through the upper part of the left arm and shoulder. The bone was shattered nearly to the head; soft parts carried away on top of arm and shoulder, and also part of the skin and muscles of the shoulder posteriorly, leaving the arm hanging by the axilla, vessels and nerves. He was very weak, and had apparently lost much blood before assistance had been rendered him, but thanks to the attention of the physicians in charge, had commenced to rally, and was not losing blood. At the time of my arrival, of course, there was nothing to do but to take out the arm at the shoulder-joint, which, with the approbation and assistance of the medical gentlemen present, I did, after the manner of Larrey, modified somewhat, inasmuch as the soft parts were so much lacerated and destroyed. I was compelled to draw the parts together posteriorly, at right angles to the usual single-line wound left by the operation. The patient passed through the ordeal moderately well. The pulse afterwards was very weak, and he hung between life and death for several days, but finally made a good recovery, thanks to the skilful management of the after-treatment by Dr. Kemp and the gentlemen mentioned, and the kind care of his friends.

Remarks—This case, at first sight, was certainly a very unpromising one, and I publish it to add to the statistics of shoulder-joint amputations, and as illustrating what to me has always appeared a fact—that shoulder-joint amputations are among the most successful, in their final termination, in surgery; and now, when I have occasion to watch the progress of such cases, I always feel highly assured that "le bon temps viendra."

SILK LIGATURES REMAINING UNUSUALLY LONG AFTER AMPUTATIONS.

Some time since, I had occasion to amputate a forearm for gunshot wound. I applied four ligatures. Those on the radial and ulnar arteries remained six months. After some time they became deteriorated and broke off on pulling them. Little abscesses formed, and in about six weeks the knots came away, and left a good stump.

Again, I amputated a boy's leg at the knee-joint, and the main ligature acted in the same way, but came away at

the end of three months, and the stump was an admirable one. I suppose the ligatures must have embraced some tendinous substance, together with the artery; and such cases should teach one to be, as I thought I was, careful in applying ligatures.

TRACHEOTOMY FOR SUPPOSED FOREIGN BODY IN THE TRACHEA.

Some time since, a woman came hurriedly into my office with a little girl, about 18 months old, in the last gasps of suffocation, telling me the child had swallowed a groundnut kernel "the wrong way." I immediately opened the trachea in the usual manner, the attempts at respiration being so feeble as to impede me but little. I could find nothing above or below, as far as I could go. All my attempts at artificial respiration, etc., proved ineffectual, the child having died by the time I got the trachea opened. I suppose the nut-kernel slipped into one of the bronchi as the parts became relaxed by death, having been tight enough before to produce suffocation. I could not obtain a post-mortem.

CAUTION AGAINST THE USE OF ETHER NEAR FIRE OR LIGHT.

Some time since, in removing a tumor from a woman's neck, I had occasion to use the actual cautery, and whilst doing so the ether on the towel took fire, and disconcerted for a moment all present, but did no damage except very slightly burning the patient's face. Fortunately, the bottle did not come in contact with the flame. I remember almost serious trouble to have arisen from this accident in this very way in the clinic of a distinguished surgeon. I mention it in order that it may serve its part in this important matter, and keep all on their guard when using ether near fire or light.

[The light should always be *above* the ether, the vapor of which is heavier than air and always falls.—EDITOR *Philadelphia Medical Times.*]

Endoscopic Examination of the Urethra and Bladder.

Dr. J. Grunfield, an assistant of Prof. Sigmund, of Vienna (*Wein. Med. Presse*), being struck with the fact that the results from the use of the endoscope in the diagnosis and treatment of diseases of the urethra have not been commensurate with those attained by the use of the laryngoscopic mirror, sought to devise some simpler form of apparatus

than the instrument of Désormeaus and its modifications. He finds that he can make satisfactory examinations of the urethra by means of an ordinary catheter with some modifications, to which he gives the name of urethroscope. In the construction of this, two objects have to be borne in mind: the instrument must bear a proper relation to the individual peculiarities of the case, so as not to injure the organs under examination, and provision for adequate illumination must likewise be made. Instruments, therefore, of varied form will be needed, but they are all made of metal, blackened upon the interior, and provided with a funnel-shaped expansion at the end which is exterior to the urethra.

The simplest form, and the one which is available in the largest number of cases, is a straight tube, the end of which is closed with a plain plate of glass. This should not be placed vertically to the axis of the tube, but at an angle, so that the rays of light used for illumination will not be thrown back from it. The tube of the instrument must be carefully oiled before introduction. Dr. Grunfeld uses for illumination either sunlight or that of an ordinary argand lamp, throwing the rays of light into the funnel-shaped end of the tube with the ordinary laryngoscopic mirror, which he employs either upon the forehead or in preference held in the hand. The mucous membrane of the urethra can be examined from the meatus urinarius to the orifice of the bladder; and by thrusting the tube still farther onward, the surface of the posterior wall of the bladder itself comes into view; and by moving the instrument, different fields of view are obtained. He uses, also, a second form of the urethroscope, which is not so available for making examinations as for topical applications, in which the end of the tube is not shut in by a plate of glass. When this is to be introduced, a conductor must be first placed inside the tube, as without this precaution the operation causes pain. In these two forms of the instrument, the mucous membrane of the urethra is presented to view in the funnel as a cone, with folds converging to the centre of the field of view. Pressure excited at the edges of this tube may give rise to some disturbance in the capillary circulation, and thus cause some change in the natural color of the mucous membrane. To obviate this pressure and consequent source of error, a third form of the instrument was devised, in which the end of the tube is closed, and at a short distance from the end there is a window in the side, closed with a plate of glass. Beneath this there

is a small mirror at an angle of forty-five degrees, so that the light may be reflected parallel to the axis of the tube. There is also a fourth form, in which the catheter is curved, the window being made upon the convexity of the curve. These windows may be made of plain glass, or of glass which has been ground to correspond to the convexity of the catheter. The catheter employed corresponded to Nos. 18, 22 and 24 of Charriére's scale. The examinations are best made with the patient lying upon the back, with the thighs flexed; but if the outer half of the urethra is to be examined, the patient can be in a standing posture. This simple apparatus certainly presents many advantages over the complicated machinery of the endoscope; the special illuminating facilities are not required, and the introduction of the catheter is not so painful to the patient.

New [?] Method of Reviving Patients Asphyxiated by Chloroform Inhalations.

Dr. Campbell, of Paris, recommends, in a late number of the *Journal de Therapeutique*, to place persons threatened with death from inhalations of chloroform head downwards and feet upwards for between ten and fifteen minutes. He considers that death arises through syncope due to cerebral anæmia: hence the advantage of inducing an artificial cerebral congestion. The usual efforts at mechanical breathing—excitement of respiratory nerves, the drawing out of the tongue, insufflation into the lungs, etc.—may be had recourse to concurrently. Dr. Campbell mentions only one case where this method succeeded: it was suggested by Nelaton during an operation performed at Paris by Marion Sims. It would appear that the late Professor Nelaton was the first surgeon who introduced this practice. The author also thinks that the inverted position tends to drive from the lung and trachea pent-up vapors of chloroform, which were increasing the asphyxia. It might be asked whether the stagnation in the cerebral vessels of blood charged with chloroform may not do more harm than good in these cases. Nor is it proved that death occurs generally from cerebral anæmia. The single case mentioned by Dr. Campbell has not considerable weight; but the method should be tried when an opportunity offers, and if it succeed in a series of cases, full confidence will probably reposed in it.—*The Lancet*, March 14th, 1874.

Stricture of the Urethra.

In concluding a long and able paper on "Urethrotomy, External and Internal," Dr. Fessenden N. Otis makes the assertions that stricture, as ordinarily met with, is absolutely within the reach of curative measures; that if completely divided, and this division maintained until healing of the parts has occurred, no recontraction can ever take place; and that the division of stricture is not more hazardous, to say the least, than rapid, permanent, or even temporary dilatation.

He says stricture may be present before difficulty in urinating occurs; it is always present when gleet is present—gleet, as a rule, meaning stricture. Dilatation of strictures is, at the best, but a temporary expedient—valuable in close stricture when urination is interfered with and dividing-instruments cannot be introduced; but dilatation is not only without permanent value, except in such cases, but it is pernicious, inasmuch as, while it is never curative, it takes the place of curative measures. He concludes by asserting that nothing short of complete division of strictures can ever result in radical cure.

Subnitrate of Bismuth in Onychia.

In the 28th of March number of your paper, I find, under the head of "A Real Remedy for Onychia Maligna," that nitrate of lead does away with all operative procedures, and cures onychia maligna rapidly and painlessly. In a note at the bottom of said article the editor remarks, "It must be little known as we have asked for it in several retail drug stores, and it was not in stock."

In many years of experience, I have found that subnitrate of bismuth, when applied in powder, produces a rapid and painless cure, with all the good results claimed for the nitrate of lead, and the bismuth being so important a remedy generally, is to be found in all drug stores, and in almost all doctors' offices.—*Medical and Surgical Reporter.*

MOONLIGHT is simply the beautiful old age of day.

Institutes and Practice of Medicine.

On the Treatment of Typhoid Fever with Cold Baths.

BY PROFESSOR BEHIER.

[Concluded from last number.]

As I have now endeavored to throw some light for you upon this question, it remains for me to describe to you the mode of treatment which I employed for our patients and the way in which I believe it is best to arrange the cold baths in the treatment of typhoid fever. Here are the cases:

1—A young girl of 19 years, lying in No. 6, Salle St. Antoine. On admission (November 1st) she presented all the symptoms of grave typhoid fever. She was then in the sixth day of the disease; the morning temperature was 40° .2 C. (104° .3 F.); that of the day,* 40° .6 C. (105° .1 F.) The pulse was 120 to 130. The adynamia was more distinct; the patient was deaf. The gaze was fixed, stupefied, the features sombre and concentrated; she answered questions dryly, brusquely, and incoherently. There were *subsultus tendinum* and fibrillary muscular tremors. The tongue and the teeth were foul. the belly moderately tympanitic, gurgling in the iliac fossa. No rose-colored spots.

In the first days of her stay in our wards she was submitted to the treatment which we habitually apply in cases of this nature (cool spongings, application of many [24] dry cups to the trunk and limbs, *potion de Todd* 100 grammes).

But we did not find any sensible amendment, and on No. 8 (fourteenth day of the disease) the weakness was more and more pronounced; she lay on her back, in extreme prostration, with continued sub-delirium. The pulse was small and contracted, the breathing short, hurried and thoraccic. We observed a marked relative dullness at the bases of both lungs, and abundance of fine subcrepitant rales (hypostasis).

In presence of such a condition I thought of some more energetic measures; and I prescribed the use of cold baths. On the evening of the 9th the patient was placed in a bath of water at 20° C. (68° F.) She was kept in for about twelve minutes, when she began to shiver; she was

*Mid-day?—EDITOR *Practitioner*.

then immediately taken out, rubbed briskly with a warm blanket, and replaced in bed.

Next day (the fifteenth) we found the patient in a veritable state of *collapse*. The temperature which on the previous evening had been 40°.6 C. (105°.1 F.), was now 35° .8 C. (96°.4 F.); the pulse was small, hardly perceptible, 140 a minute. Nevertheless we gave a bath of thirteen minutes' duration. Half an hour after the bath, the patient being warmer again, the axillary temperature was 38°.4 C. instead of 35°.8 (a difference of nearly 5°F.) The pulse was also improved; it was firmer and slower (120).

From the date of this change that marked the beginning of the treatment, the latter was continued without any incident; consisted of three baths daily of 20° C. (68° F.) temperature, and fifteen minutes' duration. After the 11th of November the axillary temperature never exceeded 38° .2 C. (100° .8 F.); intelligence was completely restored, the sordes on the teeth disappeared, the tongue was moist, with only a thin covering of mucus. The numerous fine subcrepitant rales that were heard before the treatment were replaced by fewer and coarser sounds; the hypostasis had almost entirely disappeared.

On the 17th we stopped the baths. Temperature normal, tongue moist and clean, appetite fairly good, intelligence perfect, convalescence frankly established. The duration of the disease had been twenty-four days. [Here follows a chart of the pulse and temperature which shows the striking change produced by the baths, but which we are obliged to omit.—EDITOR *Practitioner* and *Lancet*.]

II.—Marie C——, aged 19, No. 25, Salle de Antoine, admitted November 2d, 1873. She is a robust nurse, who has lived in Paris for six months, ill for the last four days. Tongue white, with red edges. Diarrhœa, gurgling in the right iliac fossa, numerous rose spots, deafness. Countenance stupid *subsultus tendinum*, agitated delirium, absolute mutism. The first eight days of her stay in the hospital she was treated with simple cold spongings, and *potion de Todd* 100 grammes; the mean temperature was 40° C. (104° F.) in the evening, and 39° C. (102°.2 F.) in the morning. On November 8th (eleventh day of disease) there was stiffness of the neck, deglutition was impossible, and there were very distinct cerebro-spinal phenomena. We prescribed cold baths of 20° C. (65°.5 F.), given in the same way as to the former patient, three times in every twenty-four hours. From that day forward the temperature fell

and remained always at a moderate level, only once over 39° C. (102° .2 F.) Intelligence and speech returned gradually; on the 20th (twenty-fourth day of the disease) the baths were stopped, the temperature was normal, and we began to feed the patient.

Assuredly we should not be in a position, on the mere authority of two cases, to pronounce definitely on the value of a treatment. Nevertheless, I determined to place these facts before you, because they are instructive in themselves; and for the rest, to establish their value, we can turn to the already very numerous documents which we meet with, on this subject, in medical literature.

In the mode of administering the baths I did not confine myself blindly to the (I had almost said) tyrannical orders of Brand. Each time that we gave a bath we did so because we thought it to be rendered necessary not by the exigencies of a programme laid down beforehand, but by some disquieting symptom—fever with temperature at or over 102°.2 F., delirium, collapse, &c. For the rest, the majority of the physicians who have adopted Brand's treatment—Bartels, Jurgendsen, Liebermeister, C. Schutzenberger, etc.—have not followed his empiric formula, and it is only very exceptionally that they have practised those frequent immersions which the Stettin physician recommends.

In a recent interesting memoir, Wunderlich the younger describes the method in which the water treatment of typhoid fever is applied by his father in the hospital at Leipzig. There they do not give baths unless the morning temperature is at or over 39° C. (102° .2 F.), and that of the evening at or over 40° C. (104° F.) The baths are at 18° or 20° C. (64° .4 or 68° F.); they last from fifteen to twenty minutes. If cerebral symptoms are early declared, Wunderlich employs baths even though the temperature be below 102° .2 F. An intense bronchitis or pneumonia is for him a primary and formal indication for hydrotherapic intervention. In our No. 9, we saw that a genuine hypostatic pneumonia existed, which disappeared very rapidly after the first immersions. Without doubt the action of the cold stimulates the reflex activity of the pulmonary vessels, as it revives the cutaneous functions, and thus dissipates pain or congestions.

Brand allows of no contra-indication, unless it be that of intestinal perforation. Wunderlich is less absolute, and without refusing the benefits of hydrotherapy to patients who have attendant diarrhœa, albuminuria, heart-mischief,

or pregnancy, he stipulates for a less energetic treatment, and the use of warmer and less prolonged baths. It is in these cases, I think, that we may usefully adopt the method of Ziemssen, which consists in placing the patient in a warm bath, the temperature of which is gradually lowered by adding cold water to it.

As a formal contra-indication, besides hæmorrhage and intestinal perforation, Wunderlich mentions collapse. As to the last, I cannot share this view, and I believe, on the contrary, that the plunge bath, and cold affusions are one of the best agents that we possess for dissipating that tendency to paralysis of the vasculo-respiratory centres which is the primary cause of collapse. Our patient in No. 9 is a convincing example of this. On the morning of the fifteenth day she was threatened directly with collapse, the nose and extremities were cold, the axillary temperature was at 96° .8 F., the pulse was thread-like and scarcely to be felt. Half an hour after the cold bath the patient had become warmer again, the pulse and temperature had risen, and all traces of collapse had disappeared.

In grave cases of pulmonary or intense cerebral form, Brand, Liebermeister, and Wunderlich recommend the application of iced compresses to the head and chest in the intervals of the baths.

Quite lately, some authors have endeavored to perfect the machinery of refringerant medication by proposing certain innovations which, to my thinking, are more ingenious than practical. Thus Senator, starting from the true observation that cold, by contracting the cutaneous vessels and anæmiating the skin, hinders the loss of heat, proposes the simultaneous employment of cold baths and of rubefacients to the skin. He says that he has had good results from applying numerous mustard-plasters to the surface of the chest and abdomen before the bath, plasters of such a kind that they can be left on when the patient is in the water. Lastly, of late a physician named Kemperdick has, in a case of typoid fever, replaced the cold baths by injections, of cold water into the rectum, by means of a catheter with a double current introduced a long way, and declares that in this way he succeeded in affecting the general temperature of the patient. It is doubtful whether such a practice offers sufficient advantages to compensate for the inconveniences which belong to it.

What are, definitely speaking, the advantages of this treatment, which have gained it so many fervent adepts, and which cause it, in certain countries—Germany for

instance—to be employed to the exclusion of almost every other remedy? This is the final point for us to elucidate. A simple glance of the eye, cast upon our thermometric curves, will spare you, so to speak, all commentary. You see that by the means of a few baths administered in each twenty-four hours, we succeed in beating down and mastering a febrile movement which everything seems to show would be violent and lasting. In satisfying this essential indication, the lowering of temperature, hydrotherapy weakens at the same stroke almost the whole group of the symptoms of typhoid pyrexia. The nervous centres are the first and the most happily influenced; the delirium departs, the intellectual torpor is banished, the patient comes back to himself in what surrounds him; at the same time the carphology, *subsultus tendinum*, and all other indices of profound nervous perturbation disappear. The respiratory centre also participates in this remarkable modification; the inspirations become deeper, slower, more powerful; hæmatosis is effected more completely, and the bronchi, resuming their contractility, expel the secretion which obstructs them. The skin resumes its tone and its suppleness; the blood propelled by the heart in stronger and more regular waves, circulates more actively, and revives the stagnant secretions. Even the digestive canal presents a notable improvement, the tongue cleans and becomes moist, thirst subsides, and tympany diminishes.

Such is the detail of each important symptom: now let us address ourselves to that high criterion of every therapeutic method, the study of the mortality; we shall demonstrate an encouraging result. Brand declares that of 171 patients treated by his plan up to 1868, 170 were cured. According to him a fatal result *cannot* happen if the method be carried out rigorously. But it is proper to remark that Brand's figures have been made up mostly from practice in the towns, which is much more favorable than hospital practice. M. Glenard saw at Stettin, in 1870 and 1871, 89 patients all cured; and of 12 patients at Lyons, treated by M. Glenard himself, all were cured by the method of Brand.

Other authors, without obtaining such absolute success, have nevertheless proved the very remarkable efficacy of this method of treatment. We find, in the already quoted memoir of V. Wunderlich, the following statistical results:

In the Leipzig clinic there were treated *without* hydrotherapy, from 1851 to 1867 (16 years), 1,178 cases of typhoid fever, with 213 deaths; *i.e.* a mortality of 18.1 per

cent. From 1868 to 1872 there were treated, *by cold baths*, 251 cases with 18 deaths; *i.e.* a mortality of only 7.2 per cent.

Here, moreover, are other statistics from the same author, which are still more impressive;

	Mortality with treatment without baths.	Mortality with treatment with baths.
Jurgendsen - -	15.4 per cent.	- 3.1
Ziemssen and Immermann	32.2 "	- 7.5
Liebermeister and Hagenbach	26.2 "	- 9.7
Riegel - - - -	20 "	- 4.3
Stohr - - - -	20.7 "	- 6.6

These figures appear to test the treatment well.

There remains one sole objection—the following: the cold, by forcing the blood towards the internal parts, may favor the production of intestinal hemorrhages.

The statistics of Leipzig clinic bear out this idea, in appearance at least. In fact, of 251 typhoid patients treated with cold water, 18 had intestinal hemorrhage, or 7.1 per cent.; whereas, according to the tables of Louis, Griesinger, Ragaine, etc., with ordinary treatment hæmorrhage does not occur in more than 3 to 4 per cent. of the cases.

Wunderlich thinks that the Leipzig statistics are derived from too small a number of patients (251) to be decisive, and believes that we ought to consider the influence of series. He does not lay the blame of the greater frequency of hemorrhage upon the baths, for these bleedings, in the 18 cases in which they were observed, were not produced immediately after immersion, but some hours, often half a day, afterwards, when the centripetal repulsion of the blood no longer existed. Finally, which is a fact of the highest importance, these cases of hæmorrhage were not serious, and the whole number ended in cure.

According to Wunderlich it would be precisely the employment of the baths which so singularly diminished the gravity of the complication in these cases. The patient, thanks to the treatment, is placed in such conditions that he bears these hæmorrhages much better, and they become so to speak, innocuous. Thus, says he, if intestinal hemorrhages are made more frequent, their gravity is much diminished, by cold baths. But before accepting this dictum of Wunderlich, we must remember that I had occasion to point out to you that bleeding from the bowels in typhoid fever has not always the gravity which is usually ascribed to it, and that Graves, Trousseau, and myself had observed many cases in which hæmorrhage terminated favorably. I shall not return to this point, which I have already

studied in detail with you, but it is well to remember it when we are appreciating the dictum of Wunderlich.

The cases which you have witnessed in our wards, and in which cold water has been employed, have doubtless appeared to you significant in themselves; they were as you observed, grave forms of disease, which gave us the most lively anxiety: their termination, so rapid and so fortunate, is evidence not only of the harmlessness, but of the power, of the treatment which we thought it our duty to employ. It will be objected, that the number of my cases is so small; agreed, but the statistics of others fill up this hiatus. There is always room for dispute respecting an indication which is based on the physiological action of a remedy; but figures are not so easily to be criticised. A therapeutic method which can show a mortality relatively so small ought to be universally applied; it is not so much a question of progress as of humanity. I shall therefore think myself very happy, gentlemen, if my voice find an echo among you, and if you consent to share my convictions and help to spread them. You have seen: say and repeat everywhere what you have seen; that will be the best and most honest propaganda that you can help me to make.

Anorexia Hysterica.

Sir W. Gull, at the session of the Clinical Society, October 24th, 1873, (reported in *British Medical Journal*, November 1st,) read a paper on an affection, first referred to by himself in 1868 under the name of *apepsia hysterica*. In the paper read he had preferred the name *anorexia hysterica*, which had been applied to the condition by Dr. Lasegue, of Paris, as more consonant with the facts; as lack of appetite for food, and not failure of digestion, characterized the disease. The disease occurs, mostly, in young women between the ages of fifteen and twenty-three, and was characterized by extreme emaciation, and was often considered to be due to latent tubercle or abdominal disease, or to the so-called atrophy. In the one fatal case, in which death was due to starvation and thrombosis of the femoral artery, the *post-mortem* showed no tubercular or other lesion. He was disposed to consider the want of appetite as due to a morbid mental state, and hysterical condition of the pneumogastrics of central origin. He

might use the term hysterical, in naming the disease, though without regarding the strict etymology of the word, or assuming that the subjects of this affection presented the ordinary symptoms of hysteria. In regard to the treatment, he advised moral control and feeding; regarding medication by drugs as of only secondary importance.

In the discussion that followed, Dr. Quain differed from the author of the paper in regarding the disease as due to some real morbid condition of the digestive organs, and not to nervous influences; the cause being peripheral, rather than central.

At the same meeting, another paper was read by Dr. Gull, in which he described a cretinoid state, supervening in the adult, coming on at the age of forty and upward. The morbid change consisted in a general and gradual increase of bulk throughout the frame, with an especial change in the face and expression, and corresponding change in locomotion and mental activity. In four cases, the thyroid body was not enlarged; but he was unable, from the fullness of the tissues of the neck, to ascertain whether it was wasted or not, as it was found to be by Dr. Flagge, in cases of sporadic congenital cretinism. He had not observed the disease at all in males. As far as his experience allowed him to judge, treatment seemed to fail in producing marked improvement.

The Value of Guarana in Chronic Rheumatism.

Dr. Edward A. Rowson, Assistant Surgeon to the Carlow Infirmary, writes to the *Irish Hospital Gazette*, April 15th:

Suffering severely from lumbago, and finding all vaunted remedies fail, I tried guarana as an experiment. I took fifteen grains blended with hot water, and added cream and sugar. For twenty-four hours afterwards I had a delightful relief from pain. I thought it must be a coincidence; but on the return of the lumbago, I took another dose in the same manner and with similar result. I gradually increased the dose to forty grains and took it regularly, once a day, for about a week. The lumbago disappeared. I gave up the guarana, and in a few days the pain in the back returned. A forty grain dose removed it, and it did not return for several days afterwards. Now, whenever it does, I have my remedy at hand. During the last month

I have experimented largely with guarana on a variety of patients, both rich and poor. The results vary. When the pain is acute, coming on with sharp stings, guarana acts like magic; when it is of a dull, aching character, the drug is slower in its action, and several doses must be taken before any decided benefit can be perceived.

I have come to the following conclusion, viz., that whenever the fibrous envelopes of nerves, the aponeurotic sheath of the muscles, the fasciæ or tendons are the parts affected, guarana gives, if not instantaneous, at least very immediate relief, which will last from twelve to twenty-four hours; and I confidently expect that perseverance in the use of the drug, gradually increasing the dose up to forty grains, will entirely remove any of the above mentioned kinds of rheumatism.

Of the good effects of guarana on the nervous hemicrania there is no doubt; and I trust it will prove, in other hands, as valuable against rheumatism as it has been in mine.

I find that guarana was examined by Martius, in 1829, and by Gravelle, in 1840. According to them "it stimulates, and at the same time soothes the gastric system of nerves, and reduces the excited sensibility of the cœliac plexus, thereby diminishing febrile action, and strengthening the stomach and intestines, particularly restraining any excessive mucous discharges; at the same time increasing the action of the heart and arteries, and promoting diaphoresis."

Whooping Cough depending upon a Fungus Growth.

Dr. Letzeuch (Vinchow *Archiv*, 1873, lvii.), believes that whooping cough is produced by a fungus growth upon the tonsils, the throat, and the upper part of the larynx. The proofs, however, which he has given in support of his opinion are not absolutely convincing. He remarked that during an epidemic of whooping cough, the remarkably satisfactory influence of quinine. Under its influence the paroxysms became less violent and less frequent; the duration of the disease was also shortened. He found one grave objection to the use of the quinine—viz., the injurious effect it exercised upon the digestive system. To avoid this he brought the drug directly in contact with the mucous membrane of the larynx by means of an insufflator; he tried this in three cases and the result was excellent.—*Obstetrical Journal.*

CASE OF INTRA-RECTO-ABDOMINAL MANUAL EXPLORATION.—Dr. Leale reports the case of a woman, æt. 45, who, while suffering intensely from an attack of dysmenorrhœa, drank, with suicidal intent, two ounces by weight of pure chloroform. She was seen half an hour after, at which time she was profoundly anæsthetized, and had not vomited. Free emesis was produced by salt and water, but the ejecta did not emit the slightest odor of chloroform, while at the same time the expirations were strongly charged with its vapor. The stomach was washed out by means of a pump, and about a pint of water (100° Fahr.) was injected to act as a brisk diuretic. Her pupils were moderately dilated, and did not respond to light; conjunctiva insensible. Within half an hour the pulse-rate increased from 72 to 140, the heart's action growing very feeble; the surface of the body became cold and cyanotic, and death from asthenia was evidently impending. At this time the hand was cautiously carried through the sphincter ani, passed along the rectum and the sigmoid flexure into the descending colon. Direct irritation of the solar plexus of the great sympathetic nerve was then employed, and the hand carefully withdrawn.

A return to consciousness speedily followed, and the case resulted in complete recovery.—*New York Medical Journal*, February, 1874.

NEURALGIA IN INFANTS.—Children from two to six weeks old, especially males, suffer frequently with attacks of pain in the bowels, coming on about midnight, and lasting until four or five in the morning. Children thus affected cry violently, but towards morning become quiet, fall asleep, and the next day are well as ever. This enteralgia does not seem to be caused by any fæcal accumulations; it is very noticeable, however, that during the paroxysm they pass no water, and at the end of it a large quantity of pale-colored urine comes away as after an hysterical attack. The cause of this retention of urine is unknown. The disease affects children of all classes of society, indiscriminately, without reference to their hygienic condition. The remedy recommended by Dr. Boyd (*Edinburgh Medical Journal*, Feb., 1873; *Schmidt's Jahrbucher*, 1873, No. 2) is spiritus ætheris nitrosi, eight or ten drops in a drachm of water. Immediately after with the escape of wind and the passage of a considerable quantity of urine, the crying ceases, and the little patient goes to sleep.—*Boston Medical and Surgical Journal.*

Gynecology and Diseases of Children.

Ovariotomy Successful in a Girl Eight Years Old.

Mr. Spencer Wells relates the following case in the *British Medical Journal:*

"On January 27th, assisted by Dr. Tracy, of Melbourne. and by Mr. Thornton, chloro-methyl having been administered by Dr. Day, I made an incision, nearly four inches long, through the abdominal wall in the median line below the umbilicus, and divided the peritoneum to the extent of three inches. A free cyst was tapped, emptied, and drawn out with a solid mass at the base. There was a long pedicle, and I was able to pass a silk ligature and tie the pedicle in two portions without including the Fallopian tube. I cut the ends of the silk close to the knots, leaving very little tissue beyond the ligatures on cutting away the tumor. The tied pedicle and the knots of the ligature were allowed to fall back into the pelvis. On examining the uterus and other ovary with one finger I was doubtful which ovary I had removed, though I believe it was the left. The uterus did not feel as large as a walnut, and I could not feel an ovary, nor the ligature I had just applied. The wound was closed by silk sutures, passed in the mode I usually practice in ovariotomy. During the passage of the sutures there was more difficulty than usual in preventing escape of intestines and omentum, but there was no other peculiarity in the operation. A little ascitic fluid came away after the cyst.

The solid portion of the tumor weighed three ounces, and the cyst contained twenty ounces of fluid. In the solid portion, there was a mass of bone covered with true skin, from which grew a quantity of long light hair. The hair was rolled into balls and matted together by sebaceous matter. The skin covering the bone was perfect, and lay on a bed of adipose and areolar tissue. The bone was proved on section to be true bone, not a mere calcareous degeneration. A full description of this cyst was given by Mr. Thornton when it was shown at the Pathological Society; and the specimen will be preserved in the Museum of the Royal College of Surgeons.

During the first and second days after operation, the little patient had some pain, and was rather feverish. After the third day recovery was uninterrupted, and she

sailed from Liverpool for New York on the 21st of February, twenty-five days after ovariotomy."—*Obstetrical Journal.*

Death from Vaginal Injection.

The *Doctor* says: Vaginal injections of irritating nature are habitually prescribed, without thinking of the consequences to which they may give rise. Here is an observation of a vaginal injection, followed by death, which may make those persons reflect who consider the vaginal mucous membrane as but little sensitive.

This observation has been reported in the *Gazette des Hospitaux* by Dr. Lorain. A young girl, æt. 16, was attacked with vaginitis, which was thought to be gonorrhœal. After an emollient treatment without efficacy, as the mucous membrane could not be directly cauterized, Dr. Lorain ordered an injection with a weak solution of nitrate of silver. A centigramme of nitrate of silver only had passed into the vagina, with care; nevertheless, there was great pain after the injection, the patient was restless and moved about in her bed. Ice upon the abdomen and in the vagina produced amelioration, and this condition remained for four days: vomiting took place and stomatitis, resembling mercurial stomatitis. The temperature was 37.8° C.

On the fifth day the patient died suddenly, at seven in the evening, the abdomen not presenting any peculiar tympanitis.

To what was this singular death attributable? Dr. Lorain thought this might be attributed to some drops of pus issuing from the Fallopian tubes, caused by a reflex action determined by the pain.

At the autopsy, Dr. Tardieu, in fact, showed that there existed metritis of the mucous membrane, with suppuration.

The Elastic Ligature.

Mr. Henry Kettle reports the case of a lady who during four years of married life had always suffered excessive pain during coitus. For eighteen months this pain had been almost intolerable, and all sexual intercourse had ceased. She was in a depressed, emaciated and generally

miserable condition. She had been treated for some time by a distinguished specialist for vaginismus, but had never obtained any relief. Upon examination there was found growing from the posterior fourchette, more upon the left side than the right, what appeared to be an exaggerated third nympha, in breadth about an inch, but much broader at its free extremity; in length an inch and a half; it was exquisitely sensitive, so that even walking produced great pain. A double elastic ligature was passed through the base of the growth and was tied on either side. In three days the whole of it had separated, leaving two small granulating spots, which were completely healed in three or four days more.

The cure was complete and permanent.—*The Lancet*, March 21st, 1874.

The Use of Sponge Tents in Displacement and Enlargements of the Uterus.

Dr. Klencke (*Deutsche Klinik*, 32, 1873) gives an account of three cases of chronic metritis and hypertrophy of the uterus, one of which was complicated by retroversion, which he successfully treated by the use of sponge tents. He adopted the treatment from Dr. Krone, who employing sponge tents to dilate a retroflexed and hypertrophied uterus to ascertain if the increase of size was due to fibroid growths, found after several had been used that the uterus returned to its normal size and position. Dr. Klencke compares the effect of the sponge tents to that going on in the puerperal state. He thinks that in a slight degree a lochial condition is produced, through which the involution of the organ is brought about; and since the greater number of these diseases arise from an interruption to the puerperal state, this method may be looked upon as a continuation of and the complement to the normal process of involution.—*Obstetrical Journal.*

Pathognomonic Sign of Pertussis.—The practitioner may be sometimes consulted on a case of whooping cough, without having an opportunity of witnessing a paroxysm. In such a case, M. Bouchut recommends him to examine the frænum linguæ, which he will always find the seat of a small ulcer in children the subjects of pertussis, or who are on the point of becoming so.

SUSPECTED PREGNANCY.—FOREIGN BODY IN THE BLADDER.—Mr. T. W. Hine relates the case of a girl, æt. 17, who was admitted to the Hospital for Women, having been dismissed from her situation on suspicion of being pregnant. She had not menstruated for six months; her abdomen was very prominent; her breasts were large and full, the nipples firm and projecting from a dark, well-defined areola, which was studded with enlarged follicles; there was no milk; she had had severe attacks of vomiting. Since the cessation of menstruation she had suffered from temporary attacks of incontinence of urine, and had not passed more than a wineglassful at any time, but micturition was painless. The urine was thick, dark, turbid and offensive. On passing a metallic catheter into the bladder a large calculous mass was struck, and was subsequently removed with the lithotrite. It proved to be a tooth-brush handle encrusted with urates and phospates. The girl admitted having used it to relieve stoppage of urine. In a week she was discharged well, and twenty-five days afterwards she menstruated for the first time in seven months.—*The Lancet*, January 24th, 1874.

DANGER OF INTRA-UTERINE INJECTIONS.—The *Gazette de Joulin* gives the details of two cases, which show that while intra-uterine injections are energetic agents in modifying the conditions of this mucous cavity, they should only be employed with caution.

In one case, though the patient had become enfeebled by repeated hemorrhage, she endured, without suffering inconvenience, two injections of the uterine cavity. A third, consisting of a weak infusion of chamomile and diluted perchloride of iron, was succeeded by death in thirty hours after decided symptoms of subacute peritonitis. The mucous lining of the uterus and right fallopian tube, and the adjacent peritoneal surface, were found, after death, covered with an ink black clot and presenting unmistakable evidences of inflammation.—*Medical Examiner*.

FOR THE CHAFING OF INFANTS.—Take of powdered starch two parts, white oxide of zinc one part. Make a fine well-mixed powder. Dust the abraded parts, with the powder, after proper cleansing.—*Exchange*.

Ophthalmology and Otology.

On Some Cases of Neglected Iritis.

BY H. S. SCHELL, M. D.

Inflammation of the Iris is one of those disorders which has long been well understood, not only by ophthalmologists, but by the profession generally.

Such, at least, is the usual impression. But the fact is that the disease in question is very often overlooked or mismanaged, and in consequence many cases may be seen in which, though the acute stage has finally subsided the eye is left permanently injured: its functions can no longer be properly performed.

In some instances of this kind, vision may be interfered with by bands of false membrane crossing over or even occluding the pupil.

Or, although the pupil is clear, attachments may remain between the iris and the lens capsule, keeping the former in a smouldering fever of restraint, ready to burst out at any moment into a vigorous attack of fresh inflammation.

And this time the mischief may be so thoroughly done that the choroid, retina, and vitreous, one and all are involved, and the vision impaired beyond hope of recovery; or the healthy eye may finally set up sympathetic action, and to save it we may be forced to remove the one first attacked.

Especially in iritis must we oppose the very beginnings, if we hope to effect a perfect cure; and it therefore becomes a matter of much importance to know why these earliest stages are so often ignored.

In very many cases, it seems probable that the violent congestion or inflammation of the ocular conjunctiva, which so generally accompanies the disease, is responsible for its obscuration.

And it is quite natural that it should be so. A person with a sore eye applies for treatment. His eye is painful, watering profusely when any attempt is made to examine it. The spasmodically-contracted lids are forced apart just long enough to disclose a crimson conjunctiva and a clear cornea, and the first impulse is not to subject him to the pain of a further examination, but to prescribe some cooling lotion or astringent drops, and let him go in peace.

The following is a case in point:

M. C., female, aged 39, came to the Eye and Ear Dispensary of St. Mary's Hospital on the 5th of August, 1873. Her right eye had been very painful for two weeks. She had consulted one physician who had given her an astringent wash, and afterwards another who had advised the constant application of a cold infusion of slippery elm bark. But these medicines had only caused an aggravation of her symptoms. Upon examination, an intense congestion was found pervading the conjunctiva; but through the network of interlacing vessels could be dimly seen a rosy zone of radiating vessels surrounding the cornea. There was a well-marked phlyctenula just beyond the outer margin of the cornea; also, great intolerance of light, lachrymation and dimness of vision. The iris was of a dull, yellowish color, while that of the sound eye was a bright gray. Under the influence of alternate light and shade the contracted pupil moved very slightly and sluggishly.

She was ordered, for local use, a solution of the sulphate of atropia, and to take colchicum and Dover's powder. When she returned to the dispensary on the 8th, the pupil was dilated, but irregularly, showing two points of adhesion to the lens. Mercurial inunction and iodide of potassium gr. x. t. d., were prescribed, and on the 17th, the pupil was widely and regularly dilated, the pain and photophobia gone, and the eye apparently well, except the remains of the phlyctenula which was shortly cured by the local application of calomel. The atropia, however, was continued for the remainder of the month.

In the following case, also, the conjunctiva had occupied more than its share of attention.

C. S., a married woman, aged 32, presented herself for treatment August 5. Her left eye had been sore nearly a month. During that time her physician had prescribed for her various eyedrops; had blistered her on the temple and back of the ear. Upon inspection, the conjunctiva was found deeply injected, the episcleral zone barely discernible, the iris dull, and its color changed from blue to green. A well-marked brownish nodule, the size of a hemp seed, projected from the surface of its upper and outer segment, and opposite this point the episcleral zone of vessels were better marked than elsewhere. A few drops of an eight-grain solution of atropia placed in the eye caused in the course of half an hour some irregular dilatation of the iris, showing the existence of a synechia behind the nodule and at the lower edge of the pupil.

Upon close cross-examination, no further evidence of venereal taint could be obtained.

A solution of atropia for local use and mercurial inunction were ordered.

On the 15th the gums were found to be spongy; the nodule on the iris had disappeared; there was slight hypopyon in the anterior chamber, and the pupil was regularly and widely dilated. She was ordered to discontinue the inunction and to take pot. iod. gr. xv t. d., also liq. morph. sulph. f℥i p. r. n., for the relief of nocturnal pain. On the 5th of September she considered herself quite well.

There is another class of cases, where the conjunctiva is not at fault, but the condition of the iris is disguised by that of the cornea. And here it is well to remember that iritis is often the main and visible link in a chain of disorder with keratitis at one end and destruction of the choroid and the retina at the other.

An inflammation of the cornea is always accompanied by more or less injection of the small, straight radiating vessels around its edge; but whenever that ring of vessels is seen, suspicion should be aroused as to the condition of the iris, and a thorough examination of the latter should be made without delay.

L. S., a married woman, aged 40, applied for treatment on the 2d of September. Her left eye had been troublesome for a month, and had been treated with various drops and lotions without benefit. There was a general haziness of the cornea, with some dotted opacity on its posterior surface, and a slight injection of the sclerotic vessels bordering the cornea. The naturally brown iris was of a somewhat more reddish hue than in the healthy eye, and the pupil responded not at all to the stimulus of light. A few drops of an eight-grain solution of atropia produced a scarcely visible effect on the pupil, which showed, however, no irregularity in its outline. The woman was apparently in the best of health, but said that her children were unhealthy, and that she had had several abortions. She was ordered to apply locally a four-grain solution of atropia three or four times a day, and to rub ung. hydrarg. ʒi. in each armpit night and morning. On the 12th, the pupil was fully dilated and the eye improved.

Pot. iod., gr. x t. d., was prescribed in place of the mercury. On the 4th of October she was apparently well.

And so one might go on, almost ad infinitum, with the recital of cases of this kind, in which the sufferer is finally forced to seek relief at the hands of specialists, or to endure

a vision permanently impaired. And yet no disorder of the eye is more certainly detected than iritis, if only a careful search be made.

A particular set of symptoms always accompanies the affections; but while some of these are always present, the others may vary in degree and even be entirely absent.

These symptoms are :

1. *Sluggishness of the pupil under the stimulus of light.* This is the most important test of all, and is present in every case. The want of mobility results from the congestion of the vessels of the iris and from effusion into its structure. As the disease advances, pseudo-membranous attachments form to the capsule of the lens, or bands extend across the pupil, or even fill it up and prevent all motion.

If the healthy eye is closed and the other alternately shaded by the hand and exposed to the light, we can generally arrive at a pretty good notion of the condition of the iris. If, however, any doubt remains, a few drops of a four-grain solution of atropia may be placed in the eye, and in some cases, where the secretion of tears is so great as to wash away the mydriatic almost immediately, it may be necessary ro repeat the application in a few minutes. After the lapse of twenty minutes or half an hour the effect on the pupil may be quite evident to ordinary inspection. If not, we can take a lens of two and a half of three inch focus, and concentrate the light of a lamp obliquely upon the pupil. A similar lens may now be used to examine the eye, and may show us perhaps little points on the anterior capsule of the crystalline lens, left by the iris in breaking loose from its false attachments ; other adhesions not yet broken down ; minute specks of plastic matter on the papillary margin ; or a swollen condition of the whole membrane.

Unless absolutely necessary for purposes of diagnosis or treatment, it is, however, almost a cruelty to put a strong solution of atropia into the eye of a person who is obliged to depend upon that organ in his daily occupation. The intense glare of light which often results from the improper use of atropia is distressing in the extreme, and the paralysis of the accommodation renders vision practically useless for any kind of near work. The dilatation will last in such cases for a week or ten days, to the great annoyance and alarm of the patient.

2. *Change of color.* This is sometimes the most striking symptom at first glance. The result is such as might be

produced by the mixture of a reddish-yellow with the natural hue, though it is often disguised by haziness of the cornea, or turbidity of the aqueous humor. The change in the general appearance of the iris is aided by the fact that the bright and delicate radiating fibres which may be seen to compose the healthy organ become blurred and dull.

3. *Sclerotic zone.* The rosy zone of short, straight vessels surrounding the cornea and radiating from the pupil as a centre is always present in iritis. The irregular, branching vessels of conjunctival hyperæmia may overlie this zone, but do not often hide it entirely. We must look for it through the conjunctiva, and we are aided in doing so by sliding the latter membrane about a little with the fingers, so as to heighten the contrast between the movable vessels and the fixed ones beneath. If keratitis coexists the zone may be due to that affection, and we must look for other symptoms.

4. *Pain.* More or less pain about the eye is always present, especially at night. But this symptom is, of course, not peculiar to iritis.

5. *Intolerance of light* is seldom entirely absent. This condition, however, may depend on other pathological changes than the one under consideration, as may also—

6. *Dimness of vision.*

Attention to these symptoms may serve to detect any case of iritis, and in its ordinary or plastic form no other will be marked. But in the serous form there may be only slight injection of the episcleral zone, the conjunctiva may be unaffected, and, while the color of the iris is but little changed, the absence of mobility is sometimes complete.

In the gummatous form we have the symptoms of a syphilitic gummy tumor of the iris superadded to those denoting an inflammatory condition of that organ.

In regard to treatment, it is well to bear in mind that cold demulcent infusions and astringent washes only aggravate the disease. The conjunctiva, therefore, may be left to take care of itself, while energetic measures are directed towards the little membrane on which so much depends.

The sulphate of atropia is from first to last an indispensable remedy. If the alkaloid itself is used, a solution of sufficient strength can be obtained only by the addition of an acid, and it is very difficult not to get an excess of the latter, with a resultant solution which is highly irritating to the already inflamed conjunctiva. A solution of four

grains of the neutral sulphate in a fluidounce of distilled water forms a perfectly bland application.

It is best applied by drawing down the lower lid and placing within it, by means of a pipette or a quill, a couple of drops every hour until the pupil is fully dilated or we find that it is firmly bound by synechia. In the latter case the atropia is useless, and should be suspended until the resolvent effects of mercury can be obtained.

It will also be futile to employ atropia in the beginning, if the grade of inflammatory action is very high, or the ocular tension is much increased. The former case will need a certain amount of derivative treatment, leeching of temples, purgation, etc., and the latter the performance of paracentesis of the cornea before the mydriatic can be absorbed.

When the pupil has been once fully dilated it is often sufficient to use the atropia once, daily, to keep up its influence; but it may be instilled oftener, of course, should it be necessary. The object is to get and keep the iris in the condition of as small a rim as possible. Even after the case is apparently cured, we find it better to continue the local influence of the drug for a couple of weeks, or until there is no longer a suspicion of iritis; not persisting too long, however, as it appears to have a tendency to produce granular lids.

The pupil should be closely examined every day or two, and if adhesions are formed or forming, we should at once resort to the administration of mercury—preferably by inunction. If the adhesions are recent, they will generally yield to a smaller amount of mercurial than is necessary to touch the gums.

Morphia, in sufficient doses to allay pain, has a most beneficial influence on the course of the disease.

In any case, it is well to fill up the space around the globe, over the closed lid, with soft cotton, and cover with a bandage. This sets the eye at rest, and aids in the contraction of the vessels, by the warmth it maintains. But in bad cases compresses wrung out of hot water must be kept constantly applied until the most urgent symptoms are alleviated.

In every instance it will be necessary to find out the cause on which the affection depends,—whether traumatic, rheumatic, syphilitic, malarial, sympathetic with the other eye, or with some pathological condition of the system,—and to adapt the treatment to the circumstances. Cases which are obviously of rheumatic origin, and without

much plastic effusion, are often readily subdued by the administration of Vance's pills, one of which contains ext. colchici acet., gr. $1\frac{1}{4}$, pulv. ipecac, comp. gr. iv: one to be taken before breakfast and dinner, and two at night.

In a large proportion of cases our suspicions will be directed to a syphilitic origin, and, however unjust this may often be, it is certain that mercury is frequently indispensable to the cure; so that it is generally better to give the patient the benefit of the doubt so far as the privilege of taking the medicine is concerned.

Treatment of Granular Lids.

In a clinical lecture on this subject, in the *Irish Hospital Gazette*, Dr. Swanzy remarks that the first and most important thing is to provide abundance of fresh air, both within doors and without. The patient should never be allowed to remain moping in the house, as he is apt to do, but should be made to take several hours' open-air exercise daily. More, he is convinced, may be done in many conjunctival diseases by fresh air alone than by any other treatment without it. It probably acts directly and locally on the conjunctiva, and not in any round about way through the constitution. When vascular reaction is insufficient for the absorption of the granulations, it should be excited; when excessive, it should be restrained. Hyperæmia may be excited by warm fomentations and by sulphate of copper. Excessive blenorrhœa may be checked by nitrate of silver solution, containing ten grains to the ounce, applied by means of a camel-hair brush to the completely everted upper lid. A little solution of common salt should be at hand to remove excess, and this again may be washed away with plain water. The effect can be modified by the length of time the solution of the nitrate is allowed to remain in contact with the membrane. When the blenorrhœa is only slightly in excess, the liq. plumbi subacet. dil. of the Pharmacopœia, without spirit, is an admirable thing; it also should be washed off with plain water, and its use in this way is not contra-indicated by the presence of ulcers on the cornea. It is most important, in using any local application, to thoroughly evert the upper lid, in order that that part of the membrane may be reached which is reflected from the lid to the globe, for a neglect of this part may render the treatment abortive. Fresh

cases of acute granular ophthalmia (military or Egyptian ophthalmia) do not require any topical application. Ice compresses alone may be placed on the lids, a leech or two at the inner canthus, and the patient should be purged.

Editorial.

The American Medical Association.

The regular annual convention of this Association met in Detroit, Michigan, on the 2d inst.

Through the politeness of our friend, Dr. G. L. Simmons, of Sacramento, who was in attendance, and who is on his return home after a tour in Europe, we are in receipt of the transactions as they progressed; but as we are about going to press and every available space in the LANCET is appropriated, we shall only be able to allude in general terms to the meeting.

The address of welcome was delivered by Dr. William Brodie, of Detroit; the annual address by the President, Dr. J. M. Toner, of Washington, D. C.

The attendance was unusually large, there being about (400) four hundred present, representing every State in the Union, including several of the Territories.

Dr. Toner's address is replete with sound advice, and is one of the most comprehensive productions of the class we have ever perused.

The several sections held their respective meetings, and many very able and interesting papers were read, and referred to Committee on Publication. The section on "State Medicine and Public Hygiene," after considerable discussion, passed the following resolution:

Resolved, That it is expedient at this time to petition Congress for the establishment of a National Sanitary Bureau.

The Association were very handsomely entertained by the citizens of Detroit in general, and especially by the Mayor of the city, Dr. Morse Stewart, and many private parties at their residences.

Doubtless this convocation of the profession will be noted not only by the superiority of its papers and discussions, but will also be remembered by all who participated as one of the most agreeable that the Association has ever had.

Medical Department of Our State University.

A little more than a year ago, the Board of Regents of our State University inaugurated or established its medical department by accepting the donation of the "Board of Trustees" of the Toland Medical College, and appointing a Faculty consisting of the original corps of instructors, to which they added several, resident and non-residents; one from Stockton, and two from Sacramento.

The progress of this department in the brief period of one year has been more than could have been anticipated by its most sanguine friends. Opening last year with a class of some eighteen or twenty, its number has been increased so rapidly as to enable the Faculty to inaugurate its present course of instruction with a class of forty odd, giving evidence of the growing interest and confidence felt in the institution of the State.

Amongst the class some five or six nationalities are represented, some coming from as far as South America, with the view to graduation in a school, the perpetuation of which is a fixed fact, thereby securing to them for all time, an Alma Mater.

The Medical Class of 1874 is the largest ever convened in any school on the Pacific coast, and is distinguished for its regular attendance and intelligence.

We are the more pleased to allude to the progress and promised success of the school, since so much has been

said by a few croakers, who are to be found in all professions and in all communities, and who falsely conceive the idea that the royal road to prominence is through the destruction of the fair name and reputation of others, instead of emulation, which is the only true path.

This article is not written in a spirit of exultation, but simply to illustrate a principle that is as old as time itself and should govern all men and people.

Chair of Anatomy in Jefferson Medical College, Philadelphia.

Some months since we alluded to a contest which at the time was in progress, concerning the Chair of Anatomy in the time honored Jefferson Medical College.

Professor Joseph Pancoast having resigned the position it became a question who should be selected to fill it. In an institute of such renown it was considered a very important question, and consequently several candidates were presented for the consideration of the Board of Trustees.

Professor Pancoast having a son, who, for several years, had been Demonstrator in the same school, very naturally insisted that his son should succeed to the Chair made vacant by his resignation.

Other parties, however, whether through inimical feeling toward the veteran teacher or his son, or merely through that ambition which impels men in every act of life to further their own interests, at once opposed the appointment of W. H. Pancoast. He has been trained in the art of teaching under the direction of his father, to which is added the experience necessarily acquired in the dissecting-room whilst acting as demonstratorfor a number of years, and hence is thoroughly qualified to fill the position with credit to himself, his name and the school.

Without being able to grasp and discuss the grounds of opposition, we are frank to say that it was simply in bad

taste, and not treating the late professor with that consideration which his long service and untiring zeal as a teacher entitled him to, to oppose his pet schemes and natural pride and ambition to see his own son, upon whom he had bestowed so much labor, time and patience, in order to qualify, and who, to say the very least, is a thorough gentleman, educated, refined and in every way capable to fill the Chair of Anatomy in any school or college.

We therefore hail the termination of the contest through the election of Dr. W. H. Pancoast with pleasure, and are glad to add our testimony to the fitness of the selection, and to express our congratulations to both father and son upon the accomplishment of a just, equitable and righteous ambition, and the class of medical students upon their good fortune in having had so competent a teacher assigned them.

AGAIN we feel constrained to apologize for the paucity of "Editorial." The "Original Department" being of so much more importance, we believe that we are serving the best interests of our readers when we yield our space to such communications, and shall always do so when, as in the present number of the LANCET, the original articles are characterized for intrinsic worth.

VOMITING AND HÆMATEMESIS FROM CONSTIPATION.—Dr. Ogle reports the case of a hysterical girl, in whom obstinate and almost constant vomiting, with profuse hemorrhage, was found to depend upon constipation. Under the use of purgatives—calomel and jalapin—and small doses of sulphate of magnesia, with enemata and suitable mild diet, all symptoms by degrees disappeared, the pain being greatly relieved by hot spongio-piline saturated with laudanum applied to the abdomen, and the vomiting by hydrocyanic acid draughts.—*The Lancet*, March 28th, 1874.

THE character of the scenes in which we are brought up impress themselves upon our souls.

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, March, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	363	53	43	7	5	31	9	S. F. B'd of Health.
Sacramento	35	7	7	2	0	1	1	Sac. B'd of Health.
Petaluma	4	2	0	0	0	0	0	Dr. G. W. Graves.
Dixon	0	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	9	1	0	0	0	3	0	Stockton B'd Health.
Marysville	6	1	1	0	0	0	2	Dr. A. B. Caldwell.
Placerville	1	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	...	..	..	.	.	..	.	Dr. T. C. Stockton.
Oroville	...	..	..	.	.	..	.	Dr. J. M. Vance.
Oakland	...	..	..	.	.	..	.	
Los Angeles	22	4	0	2	0	2	0	Dr. H. S. Orme.
Truckee	0	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	0	0	0	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	5	1	1	0	0	0	0	Dr. M. B. Pond.
Watsonville	0	0	0	0	0	0	0	Dr. W. W. Ross.
Folsom	2	1	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	1	0	0	0	0	0	0	Dr. C. L. Anderson.
Suisun, Fairfield	3	1	0	0	0	0	0	Dr. S. D. Campbell.
Colusa	9	3	1	0	0	0	0	Dr. Luke Robinson.
Trinity County	...	..	..	.	.	..	.	Dr. J. C. Montague.
Santa Barbara	9	2	0	0	0	0	0	Dr. C. B. Bates.
Redwood City	0	0	0	0	0	0	0	Dr. Kirkpatrick.
San Andreas	...	..	..	.	.	..	.	Dr. C. B. Robertson.
Auburn	...	..	..	.	.	..	.	Dr. A. S. Dubois.
Tulare County	6	0	3	0	0	0	0	Dr. M. Baker.
Siskiyou County	2	1	0	0	0	0	0	Dr. Daniel Rearn.
Ione City	...	..	..	.	.	..	.	County Recorder.
Placer County	...	..	..	.	.	..	.	County Recorder.
Susanville	2	0	0	0	0	0	0	Dr. J. J. Sawyer.
Downieville	1	1	0	0	0	0	0	Dr. Alemby Jump.
.....	...	..	..	.	.	..	.	

Remarks—Again it becomes our duty to remind the profession, as well as the public, of the necessity for vaccination and re-vaccination. From the information communicated to this office by Dr. Parramore, small pox has recently

made its appearance at Knight's Landing, under circumstances calculated to excite the utmost vigilance. During the prevalence of measles at the Landing, two children were attacked, one on the 6th and the other on the 12th of May, with what was supposed at first to be the morbillous affection. The first of these cases, a child aged two years and six months, soon manifested symptoms of graver disease, and died on the sixth day of its illness, of a most malignant type of small pox. The other case, a girl of twelve years of age, is still suffering from the disease in its most confluent form. A third case, that of a lady, thirty years of age, afterwards developed itself; and two more cases, in a mother and child, are, at the present writing (May 23d), presenting all the prodromal symptoms. As all these cases have occurred among relatives, although residing in different houses, it is not difficult to explain their propagation; but not so with the first case, that of the child 2½ years old, which had not been exposed in any manner, directly or indirectly, to the contagion. This case invests the whole subject with great interest, and would seem to point to spontaneous development, which is, however, very improbable, as several cases of small pox have been and still are under treatment in San Francisco.

With the view of properly carrying out the suggestions made in the previous number of this journal, for ascertaining the proportion of sickness to death, we have had prepared some suitable blank forms. These will be sent to our correspondents, as well as to all others who may feel disposed to assist in this important contribution to vital statistics and medical hygiene.

THOMAS M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

NEVER lose an opportunity of seeing anything beautiful. Beauty is God's handwriting; drink it in, simply and earnestly, with your eyes; it is a cup of blessing.

Report of Mortality from Scarlatina in San Francisco for Year ending May 30th, 1874.

SCARLATINA.	MONTH.	DEATHS.
	1873.	
	June	10
	July	14
	August	15
	September	26
	October	43
	November	59
	December	81
	1874.	
	January	47
	February	16
	March	31
	April	15
	May	21
Total		378

Noted Disadvantages of Large Doses of Quinine.

BY DR. C. BINZ.

[Deutsche Klinic. Condensed by Bettelheim in Med. Chirug. Rundschau.]

Through the author's efforts especially we have left the administration of quinine by the grain, and now give it in scruple doses during the period of remission. Because everything that is generally useful naturally does harm occasionally, Binz thinks it necessary to call attention to these disadvantages.

1. Disturbances of the nervous system and the heart. Quinine is a poison to the heart, kills by direct paralysis of the motor apparatus, probably the muscular substance. After death by quinine, in warm-blood animals, the heart is found in the diastole, and Binz believes that in such cases the "contents of the muscular fibres themselves" are injured; this influence of quinine on the heart's action must be especially considered in croupous pneumonia (Juergensen.) In this disease the patient dies, except the "rare cases in which the fever or lung affection are the cause of death, of insufficiency of heart power. If, therefore, quinine is used on account of its action on the fever and

formation of pus, especially in the beginning of pneumonia, we must always consider these cases wherein its action on the muscle of the heart predominates. Binz thinks that the cause of the cyanosis and dyspnœa, which he noticed in two cases of pneumonia, was the administration of quinine, as no other cause could be found, and that the cyanosis did not appear before the use of quinine or after its discontenuance.

In literature, Binz notes the case of Giacomini, (1845,) where somebody by mistake took three drachms sulphquinia in one dose. In the course of an hour, pain in head and stomach, dizziness, unconsciousness; nearly complete loss of sight and hearing; pulse even, slow, hardly perceptible; prostration, weakness of sight and hearing lasted for a long time.

2. Disturbances of hearing. Example of high degrees of such disturbance: Muillet tells of a friend, an officer in Algiers, who, after taking twelve grains of quinine, was relieved of a persistent intermittent fever complicated with delirum, coma, etc., but who became completely deaf and remained so (at least for ten years.)

3. Disturbances of power of speech. A boy aged 12, received two and a half shillings worth quinine for intermittent fever. After taking it, the fever disappeared, but he remained completely mute, until after one year he was again attacked by a quartan; this was relieved by preparations of ammonia. (Casper's Wochenschrift, (1845.)

4. Disturbances of vision. Briquet, who of all living physicians has tried quinine most frequently, has noted incomplete amaurosis in four cases, after three or five grammes; this lasted in one case a whole month. Graefe also calls attention to two cases of amaurosis after the use of quinine, both times associated with disturbances of hearing. In one case the weakness of sight began after the continued use of quinine during some weeks for intermittent, taking in all six drachms. The left eye improves in the course of a month without medication, but the right eye was still weak after four months. Graefe thought it possible that not the quinine, but the accumulation of pigmentary bodies within the brain's vessels, might have been the cause of the amaurosis, as the patient could not be kept under observation. In the second case a total ounce of quinine was taken (but never more than fifteen grains in a dose) for fever and ague. Buzzing in the right ear, and complete loss of sight in the right eye took place

without change that could be detected by the ophthalmoscope. After six weeks treatment (depletion) nearly perfect restoration took place.

5. Hemorrhage and eruption. The first (hæmoptisis) as a result of the use of quinine has not been proven. Also, the appearance of purpura hæmorrhagica after even small doses of quinine, has been noticed in four cases. (Gaz. des. hopitaux 1867.) In the English periodicals two cases are mentioned, in which repeatedly after the use of quinine, a diffused itching erythematous eruption, took place with consequent desquamation and œdema.

6. On the stomach and intestines, especially in fever patients, the non-solable quinine salts especially act harmless probably because the stomach of fever patients lacks free acid. (Manassein.)

7. Disturbances of the kidneys and bladder. By means of quinine in large doses, according to Briquet, albuminuria and cystitis may be produced. On the other hand the experimental researches of Binz on the action of quinine on the pus corpuscles, go to show that it acts benefically in cystitis.

After all, it is certain that the dangers of quinine medications are comparatively few, if we consider its value in inflammatory and putrid fevers.—*Detroit Review.*

Caffeine, Theine, Etc.

Dr. Alexander Bennett (*Edinburgh Medical Journal*, October, 1873, 323.) publishes the result of a series of investigations, comprising over one hundred experiments, seventy-two of which are tabulated in the article, on the physiological action of theine, caffeine, guaranine, cocoaine and theobromine. The conclusions arrived at are stated as follows:

1. The physiological actions of tea, coffee, guarana, coca and cocoa are nearly, if not entirely, due to their proximate principle.

2. Theine, caffeine, guaranine, cocoaine and theobromine are powerful poisons, inducing a series of symptoms affecting the nervous, respiratory, circulatory, vaso-morto and glandular systems, which terminate, if the dose be large enough, in death.

3. These five principles are, to all appearances, identical in physiological action.

4. In small doses, not ending fatally, these five substances produce, first, cerebral excitement, not succeeded by coma; and second, partial loss of sensibility.

5. In large doses, they produce, first, cerebral excitement; second, complete paralysis of sensibility; third, tetanic spasms and convulsions; and fourth, death.

6. They paralyze the entire posterior columns of the spinal cord; also, the entire system of peripheral sensory nerves; but the anterior columns of the cord and the peripheral motor nerves are not paralyzed.

7. They frequently produce convulsions of a chronic character; but occasionally they cause tetanic spasms, which latter are sometimes so severe as to cause opisthotonus. There is, at first sight, a resemblance between these spasms and those following the administration of strychnia. But in the case of strychnia, the action of the poison is limited to the spinal cord, the reflex function of which is so much excited that the slightest touch causes powerful spasms. A poisonous dose of theine, caffeine, etc., on the other hand, paralyzes the sensory nerves, so that external irritations do not affect the cord; but, notwithstanding, there are strong spontaneous spasms, which are probably caused by the action of the drug on the cord itself, and which spasms are not to be considered as reflex in their nature.

8. They do not produce muscular paralysis.

9. They at first increase, then impede, and, lastly, stop the respirations.

10. They at first increase, and, finally, diminish both the force and frequency of the heart's contractions.

11. They produce, at first, contraction, and afterward, dilatation of the capillaries and small blood-vessels, with stasis of the blood, indicating, at first, irritation, and subsequently, paralysis of the vaso-motor nerves.

12. They affect the temperature by first slightly lowering, and second, increasing it.

13. They usually produce contraction of the pupil.

14. They produce an increase of the salivary secretion.

15. They induce a peculiar form of tenesmus, accompanied by a copious discharge of clear mucus from the bowels.

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Seven experiments are given in detail, with comments.—*Chicago Journal of Nervous and Mental Disease.*

The Inner Life in Plants.

A most valuable discovery was communicated to the Royal Society, at one of its recent meetings, by Prof. J. Burdon Sanderson, regarding the electrical phenomenon which accompany the irritation of certain leaves. It is a well-established fact that electric currents occur in animal muscle, but it has not hitherto been demonstrated that a similar principle pervades the vegetable world. The doctrine of protoplasm and the agreement as to the cause of contraction in all living substances is much affected by this new discovery; and it is not at all unlikely that the contractile substance, both in muscle and in vegetable tissue, may be proved to be protoplasm. At any rate, it throws considerable light upon the nature of contractile substances in general. Prof. Sanderson was led to investigate in this direction from a conversation had with Mr. Darwin. The experiments are simple, and can easily be repeated and verified. The opposite ends of a living leaf of diociæ are placed on non-polarizable and connected electrodes. A reflecting galvanometer of high resistance is inserted in the circuit, and a deflexion of the magnetic needle results, plainly indicating that a current is passing from the proximal to the distal end of the leaf. If, instead of the leaf, the leaf-stalk is placed on the electrodes, a current is again observed, but running in an opposite direction. If, the leaf being so placed on the electrodes that the normal leaf-current is indicated by a deflection leftwards, a fly is allowed to creep into it, it is observed that the moment the fly reaches the interior (so as to touch the sensitive hairs on the upper surface of the lamina) the needle swings to the right, the leaf at the same time closing on the fly. The fly having been caught, does not remain quiet in the leaf; each time it moves the needle swings again to the right, always coming to rest in a position somewhat further to the left than before, and then slowly resuming its previous position. The same series of phenomena present themselves if the sensitive hairs of a still expanded leaf are touched with a camel's-hair pencil. In experimenting on an open leaf there is this peculiarity, that no effect is produced unless an interval of from ten to twenty seconds has elapsed since the preceding irritation. After each stimulation the leaf is, as it were, exhausted, and requires time for a process of restitution. This is a characteristic point, showing that, similar though the process be in both animal and vegetable matter, it is not exactly the same.

The period of latent stimulation is one-hundredth of a second in muscle, but one-third in the plant—that is, if the expression may be used, the leaf takes thirty times as long as the muscle to consider before it will allow itself to be stimulated to renewed action.—*Medical Press and Record.* —*Medical Record.*

A Rare and Extraordinary Case.

The *Irish Hospital Gazette* records an extraordinary case recently brought before the Dublin Pathological Faculty by Professor R. W. Smith, of Dublin University. The disease under which the woman succumbed, whose skeleton he exhibited, was one of rare occurrence, and difficult alike to diagnose, treat, or even name. At the time of her death the woman was forty-five years old. Fifteen years previously she had been sent to jail for some offense, which was probably committed while insane, as shortly afterward she was transferred to a lunatic asylum. During the first ten years of her residence there nothing remarkable about her was noticed, and she was employed in washing the floors, etc. At the end of this period she ceased to be able to work, and remained in bed for the remaining five years of her life, gradually becoming more feeble, and dwindling away in stature until she became about one-half of the height she was originally. She did not complain of any pain; her limbs became coiled up in every possible shape, and she seemed gradually to disappear from off the face of the earth. She died possibly, from constitutional disease of the osseous system. He (Professor Smith), however, looked upon the condition of the bones not as a disease, but as a manifestation of an as yet unknown diseased condition. Professor Smith had weighed all the bones individually; the total weight of the skeleton (including the cranium) was two and one half pounds, which equaled about the fourth part of the weight of a child at birth. The bones were extremely light, soft, fragile, and atrophied in every respect. The number of fractures were prodigious. The ribs were in a hundred fragments. The head of the humerus was bent; the fibulæ were curved; the thigh bones and pelvis were huddled up together; and the bones of the vertebræ thinned and worn away across the front of their bodies. The lower jaw was atrophied and broken into three fragments; the base of the skull was cribiform all

through; and he (Professor Smith) believed that if the woman had lived longer not a vestige of a bone in her body would have been left. As to the nature of this disease he (Professor Smith) believed that it was identical with rickets occuring in the adult; and although that opinion might appear heretical to some, yet he was glad to find that in the last volume of Trosseau's Lectures on Clinical Medicine that that distinguished author had expressed his opinion, that osteomalacia and rickets were one and the same disease.

Book Reviews.

A TREATISE ON PHARMACY. Designed as a Text-book for the Student and as a Guide for the Physician and Pharmacist, containing the Officinal and many un-Officinal Formulas, and also numerous examples of Extemporaneous Prescriptions. By Edward Parrish. Fourth edition, enlarged and revised by Thomas S. Wiegand. 1874. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

Parrish's Pharmacy, in America, has for many years been a standard authority, and next to the "United States Dispensatory," has been the work of reference to which all pharmacists have been most accustomed to turn for advice. Perhaps but few works in the English language devoted to this art and science is as perfect as Parrish's, and we feel a pride in saying that none extant excel it in its intrinsic worth.

The new editor, Mr. Wiegand, has been eminently successful in carrying out the improvements contemplated by the author and deserves great credit.

The fourth edition of Parrish's "Pharmacy" will doubtless find its way to the library of every zealous physician and pharmacist in California and Oregon, and we feel assured that no similar book so well deserves the place.

LIGATION OF ARTERIES. By Dr. L. H. Farabeuf, Aide D'Anatomie a Faculte Ancien Inteon Des Hopitaux De Paris. Translated by John D. Jackson, M. D., of

Danville, Kentucky. With engravings. 1874. Philadelphia: J. B. Lippincott & Co.; San Francisco: A. Roman & Co.

The small volume before us is the very embodiment of conciseness and perspicuity. The all-important instructions for ligating arteries are so clearly and intelligently given, the accompanying plates, illustrative of every operation, so exquisitely executed (doubtless French), and the clearness which characterizes the description of every procedure, would, in order to do justice to the book, require that we write a larger volume of commendation than that of the text.

Suffice it to say that the author was perfect master of the situation or object of his work and that the translator has done a great and good thing in having so successfully reproduced it in English, so as to make it an indispensable to every practitioner of surgery, whether he be in city or country or engaged in hospital or private practice.

THE MUTUAL RELATIONS OF DRUGGISTS AND PHYSICIANS. An Address. By Charles E. Buckingham, M. D., Professor Midwifery, etc., etc., Harvard University. April 22d, 1874.

The subject of this address has been very ably handled by Professor Buckingham. One very significant point made by the author is as follows:

"It has been the case sometimes that the pharmaceutist and the physician have run in opposition to each other. This should not be. Every man has his preference for individual members of any trade and of any profession with which he has dealings. But you have no right to turn my patient into the hands of any other medical man who chooses to send his prescriptions to you. I have no right to require my patients to buy drugs at any other store than that which they are accustomed to deal at, because he who keeps it is one who patronizes me."

Meanness is criminal wherever it exists and should be punished. We have reproduced the above few lines for the benefit of those who are in the habit of violating this

golden rule of the profession, in the hope that they will ponder well and correct a practice which, to say the least, is reprehensible.

LECTURES ON THE DISEASES OF INFANCY AND CHILDHOOD. By Charles West, M. D., Fellow of the Royal College of Physicians; Physician to the Hospital for Sick Children. Fifth American, from the sixth and enlarged English edition. 1874. Philadelphia: Henry C. Lea; San Francisco: A. L. Bancroft & Co.

The name of Charles West is co-extensively known with the science of medicine. For us to attempt to review or comment upon the work before us would only be superfluous and unprofitable. All who have devoted any attention to the study of the diseases of children have read and are familiar with the inherent worth of this book of West's, and it is admissible only for us to say that the sixth edition just issued is, if possible, more comprehensive and replete with valuable facts than any of its predecessors. To use the language of the author, "Seven years more of clinical observation and the record of 743 more cases it may be hoped has enabled me to add something to the value of the work."

SIXTH ANNIVERSARY ADDRESS BEFORE THE SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT, March, 1874. By F. W. Hatch, A. M., M. D.

We are in receipt, in pamphlet form, of this very interesting, to Californians, at least, address of Professor F. W. Hatch, in which the author not only reviews the organization and progress of the Society, but takes occasion to step aside once in a while to express his views as to the relation of the profession to society, as well as the real obligation of society to the profession, in the discussion of which subjects the author but reflects the opinions of the entire profession, as well as all thinking men, professional or non-professional, and handles these questions with the ability which all who know Professor Hatch know to distinguish him. The address will be read with pleasure and profit by all who may receive it.

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THE [illegible] UNIVERSAL [illegible] TABLE
(For [illegible], see page [illegible])

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR JULY, 1874.

Original Communications.

MATERIALISM:

An Introductory Lecture. Session 1874.

BY A. B. STOUT, M. D., PROFESSOR OF PRINCIPLES AND PRACTICE OF SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA.

GENTLEMEN :—In opening my last year's course, I began by urging that the study of medicine and its high department Surgery, to be interesting and efficient, should not be limited to the restricted outlines and special principles of a circumscribed department, but should be established on the grand broad basis of universal knowledge. I endeavored to inspire your minds with the thought, that, such universal instruction was to be found in the investigation on the most comprehensive field of research, of man ; and that as the expression of the highest perfectability of nature, the noblest study of mankind was man. Man, the centre to which all the perfectabilities of divine creation

converge, and from which radiate the diffusion of all the fine and extraordinary principles of organic life. In that lecture, I encouraged you to divest your minds of all restricted confinement to the special limits of any department; and, with the free eagle-wing of thought, soar to the first sources of universal light, and make every science, as far as the scope of the human mind permits, tributary to your knowledge.

Hence, I endeavored to persuade that it was in the combination of all the sciences into one general contributive whole or entity, that the true route to the great study of man was to be sought; and again, I maintained that it was in the appreciation of the unity of science, that the greatest concentration of force would be derived, which you would finally draw to a focus in your special department. Disregardful of this comprehensive foundation, no narrow-minded specialist can attain true eminence.

To illustrate this position I sought to show you, how this wonderful system of man is regulated and held under the dominion of the physical forces, and how divinely pliant to their astonishing correlations, is this last and most complicated conception of creative genius.

In this correlation of natural forces, and their mutual conversion, or transmutation into each other you are to seek, gentlemen, in the future, the most subtle interpreter to the still vague language of nature.

The grandest field for the application of your inventive faculties and of new discoveries in your profession is now disclosed before you, richer and nobler in extent than the heretofore unknown, or, unused golden fields of California; more attractive and romantic than the flower-carpeted plains and hills of our State.

These force-elements are light, motion, heat, sound, electricity. In their application to the human economy, we substitute *neurism* for galvanism, magnetism or electricity.

Without a propulsive *force*, we cannot admit a motive action, nor can we suppose a *force*, without a material to generate it. Without a sun, no heat: without heat, no

organic life. The application of these forces to the human system will, hence, invite your attention; and their mutations, one into the other, will elicit your admiration.

As the fuel to the steam engine is the food to animal life. Let us endeavor briefly to trace some of its transformations. A pound of food is introduced into the stomach: The system is supposed to be in full action for the assimilation of a pound of fuel, previously introduced and not yet exhausted. The food is instantly attacked by the solvent gastric fluid. This is a neuro-chemical action, and heat is generated. This heat is at once a vitalizing force, and is convertible into *motion*. The first evolution of forces being now obtained, we shall endeavor to surprise you, by showing the great development of power to be derived from our little pound of food. Its first decomposition has already diffused heat and motion. Each action of motion produces friction, out of which, again reconverted comes heat, to be absorbed as latent caloric, or be diffused into the adjoining tissues to accelerate their functions. Now appears a resultant in the form of *chyle*. This pouring through the thoracic duct, enters the heart: mixes with the blood, and rushes with that fluid to aliment every tissue and fibre of the economy.

We are regarding the phenomena in their dynamic influence only.

In the expansion and alternate contraction of the heart, its systole and dyastole, its force is sub-divided into heat, motion, and neurism: giving thereby a local aid and momentum to the force subsequently supplied from what is usually considered the first motor power, viz: the brain or neuric centre of vitality.

We have the blood now reinforced with new fuel from the chyle of digestion, and, also, from another source, with oxygenation from the lungs. Remember well, that, all this oxygenation is a subsidy supplied from the pulmonary organ, through the same evolution, or interchange of elementary forces: and derived from our pound of food: for without that stimulus the lungs could not utilize the oxygen of the air.

From the heart into the arteries, we have now, the highly heated blood hastening with all the speed which a powerful and indefatigable engine can communicate, to supply the cravings of the industrious organs of the body. Like exhausted workmen demanding fresh bread, only in this case the engine is not manacled by any "eight-hour" law.

The afflux of blood dilates the artery: the friction produces heat: the expansion provokes contraction, new emissions and absorption of force follow: the incessant repetition of expansion and contraction produce an equally continuous generation of these correlated forces, apparent heat in the blood becomes latent in the adjacent tissues. A portion of this force becomes animal neurism, giving a local vitality peculiar to the given structure it enters.

These correlative forces mutually co-operating, and reproducing each other, afford a direct auxiliary support to that universal central power which is finally to emanate from the brain.

As, therefore, the arteries supply the blood nutriment to every organ—digestive, reproductive, locomotive—you may imagine the innumerable repetitions of these dynamic changes, or metamorphoses of force in all these organs, and therefrom calculate the immense product of the assimilation of our pound of food.

The impenetrable mysteries of the co-relation of matter with MIND now intrude. How is the blood-nutriment correlated with the brain function? How does the pound of food evolve intellect? We can only answer to-day: it is so; out of matter comes forth mind. But as out of sunlight come many colors; as out of heat is derived *sound*: as *sight* and *hearing* depend on vibratory motion, may we not ask, if *mind* may not alike eventually be *demonstrated* to be a *material ether* too subtle for our grasp, and still evading the finest spectroscopic search?

Thus, gentlemen, I have endeavored to present you a broadcast, bird's-eye view over this ocean of science—the STUDY OF MAN, on which your voyage of life is cast.

The contemplation of these great forces, and their mutations into each other, becomes, then, the indispensable adjunct of your researches in the philosophy of man. While the scope of your study is immensely enlarged, your ability to penetrate into the obscure mysteries and the hidden beauties of Nature will be surprisingly perfected. As an example, you learn how the processes and the products of inflammation, or hyperplasia, may be maintained, to a certain extent, by the correlative mutations of these forces, without being entirely dependent upon the stimulating energy of the great central, cerebral force.

But, gentlemen, research in this path, the study of human nature, as well as of all physical science, by the application of these methods, has wrought grief in the pursuit of these noble avocations. It has heated up no small amount of controversy and vituperation in the social relations of the men of science and the men of the Church ; it has, to a certain extent, refrigerated the former and superheated the latter ; and certainly, gentlemen, a very great grief it is, that the ardor of the lovers of science, who yield to it a truly conscientious devotion, should be chilled and reproached by many whose faith surpasses their wisdom.

So constantly, gentlemen, will your career be molested by the like aspersions, that I deem it good and right that you should be foretaught, as far as I may humbly pretend, against the emergency.

Before introducing, therefore, the special subjects of the Surgical Department of your curriculum, I will venture a few remarks upon the subject of the *materialism* of the scientific men of the present age, and the incessant unholy war of dogma waged against them.

What is this materialism of which you will be accused, but which I shall endeavor to prove has no real foundation as a justifiable condemnation ? I will show that in your high appreciation of the wonderful perfection of all created beings and things, through the divine prescience of the great, infinite Architect of the universe, your veneration

ascends from the material to the supernal; and, as such, as worthy of supernal grace, as the faith of sectarian antagonists.

Materialism is "the theory that the material universe is self-existent and self-directed, and that the functions of life, sensation and thought arise out of modifications of matter; or the metaphysical theory, which is founded on the hypothesis that all existence may be resolved into a modification of matter." Materialism, then, is opposed to spiritualism, which is the doctrine that above the universe there is a spirit, sustaining and directing it.—Worcester's Dictionary, p. 887.

The one is the doctrine that the creation is simply a work or product of chance, and that a similar chance might have organized any other system of products; the other, that the evolution of the universe is, through all its most minute organizations, the result of the prescient thought of an omnipotent intelligence.

If, by any chance, any of you fail to perceive the truth of this latter belief, I shall seek to convert your minds, and thus my labor will not be lost.

Materialism is no new theory; materialists have disturbed the peace in the harmony of truth from time almost beyond record; but especially does the world remember the name of Spinoza; and his doctrine called Spinozism is little other than the materialism of to-day. The creative power God, the Almighty, was not absolutely denied by Spinoza; but as in his doctrine of chances a geometrical forethought antecedent to the formation of an organism was impossible, God was only an early form of matter.

Spinoza, born in 1632, in Holland, was a learned Jew; but, for his heresies, was expelled the Hebrew Church. In a spirit of charity and honor to his erudition, he was accepted into the Christian Church. Herein he proved equally obnoxious, and was summarily dismissed, or excommunicated. Nothing daunted, he published his reticent controversies; only to see them suppressed, or burnt. But he worked an influence upon his age; bribery could not tempt him;

menace he did not dread; and his influence has endured forever. Nor is he the first, nor the last learned man whose mind has failed to be inspired with the transcendent beauty of divine creation, or his moral emotions mellowed with the poetry and the harmonies of Nature. Then, to

> "Expatiate free, o'er all this scene of man,
> A mighty maze, but not without a plan."

I will firstly illustrate the impossibility of man's creation by any chance or heterogenous mingling of the material elements. Let us regard him as a physical machine, without much attention to the source of his motive power,—but with the Creator as his great Mechanic, and God his most perfect Engineer—you see before you his semblance, but divested of his protective envelope.

Since the appearance of man on earth many of the great epochs of life, involving thousands of centuries, have transpired; but it is not so very many years since man discovered and reduced to order the simplest laws and conditions of physics; the first mechanical data of the principles which govern force and motion; the scientific combinations of architecture; the minute details of house carpentry; the incessant and so often ruinous influence of gravitation, on whose nice adjustments man's equilibrium, both in full action and repose, depend; the great demonstrations of geometry, with all their applications in the great areas of astronomy—all, all, are but recent, in comparison with the evolutions of organized beings, with man their highest type, on earth; and yet the work of every vitalized organism demonstrates that the antecedent conception by a superior intelligence was indispensable to their existence; and in their exquisite symmetries are proved the pre-knowledge of all the great physical laws to which I have made allusion.

The human body, in general terms, consists of a solid head, a moveable trunk, supported by a flexible column, and four limbs. These several members are united by joints, or hinge-work. It represents a conical form, inverted with its apex; or, one might say, its two apices,

resting on the ground without any further attachment than the soles of the feet and the attraction of gravity. Viewed as a mechanism, you perceive that this construction is very unfavorable for stability in its upright position, and would be very easily overturned. Indeed, if unaided by a constant mutation of muscular forces kept in play by voluntary efforts, it could only maintain its upright position for a very short time. Through the centre of this cone a vertical line represents the line of gravitation. Now it is only by careful obedience, learned by long experience to the laws of gravity, that this erect position can be continued; the various departures from and returns to which constitute all the movements—as walking, leaping, dancing, the art of equitation—which the body assumes. So thoroughly do all these motions become educated by the action of thought and will on the muscles and joints, that their voluntary motions come finally to appear involuntary: but in truth they are never so. So rapidly is the telegraphy of the brain conducted that we fail to register its time. As an illustration of its perfect ability, all the grace and rapid performance of a Fanny Elssler is but the music of the mind transmitted to and enacted by the feet, every quaver and semiquaver of the one being converted into motion by the other.

This, then, is the converse of the mind with the great system of muscles it controls; and its perfection depends upon the trained application of the laws of gravitation and mechanism through the centre of the body, and the possible departures from it. *See, then, before you the exterior semblance of this grand mechanical combination; and yet how coarse and rude it all appears if compared with those unseen constructions of the eye, the ear and the vocal apparatus. Is this mere chance? or is it the workmanship of a God?

The motions, then, of the body are executed by a system of fulcra and levers, with force increased by pulleys, with the earth for its basis, with the brain as the engine

* Pointing to a human statue divested of the skin.

supplying the motive and motor power, and all their actions radiating from the central line of gravitation.

Let me now turn your attention to the admirable joinings by which this framework is bound together. How few look at the joints as a system; how many fail to admire the wonderful invention and genius displayed in adapting these unions and fastenings (their ligaments) to the varied requirements of the myriads of combined flexures which the head, the body and the limbs execute in such graceful and harmonious unison.

The joints. Of this subject two divisions are made:

1. Articulations with immovable union.
2. Articulation with movable unions.

1. Articulation with suture, called:

a. *Synarthrosis,* are shown in the union of the bones of the head.

b. *Gomphosis,* where one bone is driven, wedge-like, into another, as the teeth in the jaws.

c. *Synchondrosis* is articulation with an elastic cartilage like a buffer, between the uniting bones. This allows a slight mobility.

d. *Syndesmosis* is an articulation of flat bone surfaces in contact and fastened together with straps or ligaments, as the carpal or tarsal bones, also permitting slight flexion.

2. The movable unions, or joints, are called *Diarthroses,* of which are:

a. *Amphyarthrosis,* which is the technical name for joints with slight motion, and flat or slightly rounded junctions.

b. The *Rotatio trochoides,* or an articulation bound with a ring-like ligament, as the attachment of the 2d cervical vertebræ to the atlas, being a wheel motion in a third or half circle.

c. The *Ginglymus* is the roller in a groove, viz., the ankle-joint, or the astragalus in the tibia and fibula.

d. *Arthrodia* is the ball and socket.

e. Enarthrosis, a sort of nut-joint; arthrodia being represented by the slight union of the humerus with the scapula. And,

f. Enarthrosis, from which some clever inventive mind devised the beautiful ball and socket-joint, which was first created in the union of the femur with the pelvis.

Of all these the most splendid examples of exquisite ingenuity and scientific application of means to an end, are the architecture of the head to the vertical column where great mobility and little force are required. See atlas and 2d vertebræ; and the hip joint, having a limited need of motion, but the greatest strength and endurance.

When, now, you contemplate the joints, especially in connection with their muscles, the pullies, and the apophyses as levers, you cannot fail to be inspired with admiration at the pre-thought which ordained their creation.

It is only lately that contrivances have been adopted in mechanics with which to lubricate the movable joints in machinery, without taking them apart. The Synovia and its secreting membrane was invented with the birth of the vertebrate animals.

From the application and adaptation of the more simple laws of mechanics, we may now rise to the higher degrees of constructiveness.

The Eye is the most perfect object in nature; and, as perfection and order constitute beauty, it is also the most beautiful. Within the narrow limits of its orbit, may be found illustrated nearly all the grand physiological phenomena of the animal system. With the exception of the functions of respiration, digestion, and ideality, there are none I believe, of the great processes of animal nature which are not discoverable in the eye; and manifested there in the utmost perfection. The delicacy, and minuteness of its anatomy, are nowhere surpassed in the body; and, with regard to the globe of the eye, its normal structure is less frequently departed from than in any other organ. The

distribution of its blood-vessels, which elsewhere admits of variation, is always precise, neither are adventitious muscles, an unusual formation of bone or irregular position of parts ever found in this admirable and wonderful organization.

The result of such accuracy of arrangement, is the great perfection and harmony of its functions. Where is the process of secretion more completely elaborated? The crystal dew is not so transparent as the humors of the eye. As rapid as thought is its muscular motion; and intense as is this action, the utmost skill and care of the artist cannot direct an instrument so precisely to the point required, as the muscles of the eye adjust its position. The iris, which is muscular, displays the most astonishing celerity and precision of motion; in constant readiness to protect the nerve of vision from the effect of too much light, it yet never prevents its receiving enough. Viewed as an instance of involuntary muscularity, it is assuredly the most perfect specimen in the body.

The combination of power in the external voluntary muscles of the eye is a peculiar endowment found in no other part of the muscular system. Though they are usually considered, and are in the main, voluntary muscles, they are also, to a certain extent, involuntary. If the eye be directed to one object, to the exclusion of every other, for a very short space of time, the object becomes obscure, and presently cannot be seen. When, however, the slightest variation of the eye admits the rays of light from another object, the former is instantly seen with clearness. The sensibility of the eye seems to require this constant relief. But the will cannot be supposed to take cognizance at all times of the time and necessity for this slight alteration in the direction of the eye; nor can the motion be made without the assistance of the external muscles. In this respect, therefore, their action is involuntary—though they are still constantly subject to the influence of the will. The endowments of the eye, attributable directly and solely to the nervous system, are its

sensibility and the sense of vision; and nowhere in the body is sensibility more exquisite than in this organ. From the facility with which so delicate a structure may be deranged, it has been rendered by an all-provident Creator intensely alive to the least approach of danger.

In regard to the sense of sight, what would be man exiled from intercourse with the natural objects which surround him! Herein comparison with the other senses is impossible, for all are exquisite and perfect. But as it contributes essentially to the happiness of man, it is certainly among the most important of the animal functions; and it is far beyond comparison with any of the known attributes of inanimate Nature.

It is curious that nearly all the elementary tissues enumerated by Bichat may be found in the orbital space, affording a study on a small but perfect scale of most of the structures in the animal economy. Thus, the dermoid tissue covers the palpebræ; the adipose constitutes the soft cushion in the orbit, whereon the eye rests and which supports the opthalmic vessels and nerves; the cellular is everywhere, but is probably finer in its texture between the coats of the eye than in any other situation. The muscular is illustrated in the external muscles of the eye, and still more beautifully in the iris. The sanguineous is found in the opthalmic vessels; and three at least of its six terminations, viz., into veins, by exhalents and by inosculation, are here apparent. The lymphatic system exists in the eye, as elsewhere; and the glandular is found in the lachrymal and meibomian glands. The nervous system is developed in all its varieties, except that devoted to ideality. The optic is the nerve of sense; the sympathetic, or nerve of organic life, pervades every part of the system, and hence must also be here; and the lenticular ganglion, where a nerve of sensation and one of motion unite to proceed in conjunction to the interior of the eye, constitutes another beautiful example of the wisdom and design manifested in the human frame. The orbit itself displays the osseous system; the conjuctiva, the

mucous, and the serous is developed in the hyaloid membrane and in that of the anterior chamber of the eye. These are sufficient examples.

Another striking evidence that the eye is the most delicately formed, and highly perfected of the Creator's works, is the care with which he has guarded it from injury. Observe the situation of the elaborate mechanism of the ear; deeply lodged in the centre of the bones, and remote from the surface of the body, it cannot be assailed by any but the most destructive and fatal violence, nor can the anatomist approach it without the greatest difficulty. Like it, the eye is nearly surrounded by bone; and in front, where it appears more exposed, it is equally well protected. The palpebræ fend it from trifling injuries, while every muscle in the body may be thrown into instantaneous action to guard it from ruder assaults.

Such are a few of the points of beauty in the physical functions and structure of the eye. Did none such exist, its endowments alone are sufficient to elevate the mind to the highest degree of wonder and admiration. If the great universe be created on a scale too comprehensive for the mind to embrace, and thus ascend from Nature to Nature's God, in this small organ it may range at large, and those unacquainted with the structure of the instrument have yet a more ample scope for their imagination in its twofold endowments. Its first, the power of vision, scarcely surpasses its second, the *power of expression;* and if it be incomprehensible how the image of an object on the retina produces an idea of that object in the mind, we are equally lost when we enquire into the mysterious faculty of the eye to embody and express to another our inmost thoughts and feelings.

In the eye, the surgeon possesses the most interesting field for practice, and also for pathological research. Anatomy and observation make known to him the precise normal condition of the organ. He is thereby enabled to discover the least and earliest departure from it; and thence, the origin, progress and decline of disease are

delineated, as by a picture, to his view. The remark is true of nearly all the structures of the eye. As, however, disease in each assumes a different form, according to its organization, the surgeon has the enviable opportunity of forming a perfect diagnosis between them. In the varieties of the same disease, like facilities are afforded; for, as it is viewed where it exists, and not by remote symptoms, the slightest changes in form may be noted. Witness the simple and metastatic iritis. The acute forms of all diseases are comparatively easy of management; but the atonic and chronic forms often baffle the most skilful and experienced. It is here the ophthalmic surgeon enjoys his greatest advantage. He has but to discriminate between the primary and secondary affection; and as its pathological condition is not concealed, he may observe the precise effect of remedial agents; the time they prove of service; and when they cease to be of benefit. The preservation of sight is secondary only to the preservation of life. Though the ophthalmic surgeon is not denied the fame derived from the second, his reputation is chiefly due to the first. And yet, so immediate and palpable is the change he may often effect for his patient, translating him, as it were, from darkness to light, that more *eclat* may accompany his career than often the physician enjoys, who preserves life, but whose strength has been expended in a hidden course, where neither the intensity of disease, nor his skill could be adequately appreciated.

Illustrations crowd upon me; but more can only be adduced with more time.

I can but hope that I have defended successfully my theme and banished all insane materialism from your mind: if so, I have incited a genuine religion in your heart: for religion, assume what caste it may, is only the tender poetic child of devotion, and devotion is that holy differentiation between godlike man and apelike animal; that impassioned sentiment, inwrought of a jealous Deity, whose love for His last and best creation, with the mother's for her feeble, willful infant, fearing and pre-knowing ingratitude,

engrafted, profoundest of all emotions, in its inmost nature, to secure its fidelity. This is the differentiation which Mr. Darwin, in constructing his chain of many links, has ignored or forgotten ; but an all-wise Creator so planted it in every human bosom from creation's dawn, that it is as indispensable as life to existence,—all nations feel it, all nations adore and worship. Riot over it as they may, the Creator ever attains His loving object; to their knees all races bend in trembling adoration at his shrine.

> "Know, then, thyself : presume not God to scan ;
> The proper study of mankind is man ;
> Plac'd on this isthmus of a middle state,
> A Being darkly wise and rudely great,
> With too much knowledge for the skeptic side ;
> With too much weakness for the stoic's pride;
> He hangs between ; in doubt to act, or rest ;
> In doubt to deem himself a god, or beast ;
> In doubt his mind, or body to prefer ;
> Born but to die, and reason'g but to err ;
> Alike in ignorance, his reason such
> Whether he thinks too little, or too much."

Two Cases of Urethral Stricture Treated by Internal Urethrotomy.

BY CHARLES B. BRIGHAM, M.D., HARV., SAN FRANCISCO.

I.

Solomon U., æt. 42—Thirteen years ago the patient began to be troubled with stricture of the urethra. It followed a prolonged and neglected gonorrhœa. After an unsuccessful treatment by forced catheterism and dilatation, an abscess formed in the perineum, a little over a year ago. This was opened at the time, and afterwards the urine trickled away through three fistulæ, the largest of which was an inch from the median line, on the right side, half way between the scrotum and anus. Very little water passed by the meatus, but on pressing the canal, which felt externally, like a hard cord, a quantity of offensive pus could be evacuated. The urine deposited a thick

muco-purulent sediment on standing. The patient's general condition was exceedingly precarious. His pulse was at 120; his temperature at 103; he had night sweats constantly, and he felt at ease only when lying down, with hot poultices on the perineum. It was decided on the 17th of January, 1874, to perform internal urethrotomy, notwithstanding the patient's feeble condition; it was regarded as his only means of safety. For two days vain attempts were made to introduce a filiform bougie. After an hour's patient trial, on the third day it was introduced as far as the bladder, and then, the patient being etherized, the Massonneuve instrument was prepared and the operation performed, Dr. Hoffstetter assisting. The knife as it passed along seemed to the touch to cut one continuous stricture from the meatus to the end of the membranous portion of the urethra. A No. 11 bougie was introduced and left in the urethra; the fistulous openings were dissected up and cauterized with carbolic acid. In the evening his pulse was at 88, his temperature 102½; on the next day the patient felt no pain but a tired feeling in the back; the urine constantly dripping from the bougie has become quite clear; the patient had been taking ten grains of quinine daily for a few days previous to the operation; this medicine he continued using. The 19th the penis was somewhat swollen but painless; the hardness and redness which existed in the perineum around the fistula has disappeared and no urine whatever passes by the fistula. January 20th, pulse 80 to 89, the patient has milk and beef tea for nourishment. January 22d, the bougie was withdrawn; it was not coated; a drop of pus came away from the largest fistula on its withdrawal. It had been a question of doubt whether to leave this bougie in the urethra until the fistulæ were entirely healed or to take it away and trust for the cure to the effect of a free exit of urine through the now enlarged urethra, considering the danger of prolonged urethritis and of constitutional disturbance should the bougie remain in the canal, it was decided to remove it, and it was

hoped that rest in bed, with compression on the perineum, might prevent the urine from traversing the newly healed fistulæ. On the 26th of January, the urethritis had nearly disappeared, but the urine smarted a little as it passed out and was a little tinged with blood for several hours after the bougie was withdrawn. During two days there was incontenence of urine, but this trouble soon ceased and the neck of the bladder regained its strength. After February 1st, a flexible bougie was passed daily. The fistulæ were kept compressed by dry lint and wire occasionally touched with nitrate of silver. On the 1st of March, there was no trace of any opening in the perineum. The patient was then advised to take a sea voyage of a few weeks, to insure a complete cure of the fistulæ. At the time of his departure he was able to pass a free stream of water and his general health was greatly improved.

II.

Medor C. æt. 30.—The patient has had a stricture of the urethra during three years; five years ago he had a prolonged gonorrhœa; he has been treated by dilatation for several months, but of late the passage has grown so small that he passes his water with great difficulty. On examination a filiform bougie alone could be passed. The stricture is at the commencement of the membranous portion; the whole canal is irritable and sensitive; there is constantly a slight discharge from it. The patient's general condition is excellent. On the 20th of May, 1874, internal urethrotomy was performed without anæsthetics; a No. 12 blade of Massonneuve's instrument was used; no preparatory treatment was carried out except the emptying of the bowels. A No. 11 bougie was left in the canal 42 hours; there was no irritation of any account, indeed, the pulse remained at 80 and the temperature at 97 throughout; there was a very slight urethritis during four days. On the fifth the patient left his room to walk about as usual. On the 29th May a No. 8 bougie was introduced without difficulty and kept in the canal twenty minutes.

A No. 9 is now passed daily; the patient is delighted with the size of the stream he passes. The case contrasts favorably with the preceding in the slight constitutional disturbance which the operation occasioned and in the short duration of the treatment.

PROFESSOR TOLAND'S CLINIC AT THE CITY AND COUNTY HOSPITAL—CASE II.

Case of Aneurism of the Left Subclavian Artery Cured by the Distal Ligation.

REPORTED BY R. A. MCLEAN, STUDENT MEDICAL DEPARTMENT UNIVERSITY OF CALIFORNIA.

John Cross, æt. 50, miner, native of Ireland, admitted to Professor Toland's ward January 8th, 1874.

On examining the patient, a large pulsating tumor was found at the root of the neck, on the left side. Its superior surface was limited internally by the sterno-clavicular articulation and anterior margin of the sterno-cleido-mastoid muscles, and externally by a point beneath the anterior border of the trapezius, just above its clavicular origin. In the interval between the sterno-mastoid and the trapezius, it formed an ovoid tumor apparently as large as the closed hand. Auscultation and palpation elicited the usual signs of subclavian aneurism, which were well marked in every particular.

The patient first noticed a slight enlargement above the clavicle a year before, but its progress had been slow until within the two months prior to his admission to the hospital. During this time, however, it had increased rapidly in size. Partial paralysis of the left arm had occurred, from pressure upon the brachial plexus, and pressure upon the thoracic duct, interfering with nutrition, had caused

anemia to a considerable degree. A tonic course of treatment and good diet were prescribed, and kept up until January 24th—a period of nearly three weeks. During this time the tumor continued to increase in size, but the patient's general health was so much improved that Professor Toland decided to operate Saturday, January 24th. The Professor thought the Hunterian operation impracticable, as the tumor involved the first as well as the second and third parts of the vessel; and he accordingly selected the distal operation. The third portion of the axillary artery was chosen for the seat of the ligature.

Chloroform was given, and an incision, two inches in length, made in the course of the artery, at its exit from the axilla. The areola tissue and sheath were divided upon the grooved director, showing the artery, with the median nerve lying upon it, and the axillary vein upon its inner side. These structures were drawn aside and held by an assistant, while Mott's aneurism needle, threaded with a double ligature, was passed under the vessel, from the inner to the outer side. One strand of the ligature was pushed up to the junction of the sheath and artery above, and firmly tied with the reef-knot. The remaining strand was secured in the same manner below, leaving a space between them of only about a third of an inch, in which the artery was denuded. The longer end of each ligature was brought out at the lower extremity of the incision, a small tent of wet lint introduced, and the edges of the wound united above with two silver sutures. Finally the water dressing was applied, and the limb enveloped with cotton-wool and oiled silk. The pulsation in the tumor was perceptibly lessened immediately after the ligature, and gradually decreased up to the sixth week from the date of the operation, after which no pulsation or bruit could be discovered. The ligatures came away on the twentieth day after the operation, and the wound healed a few days afterwards.

Since the circulation has ceased in the tumor, it has gradually grown smaller and less painful. The collateral

circulation has become fully established, the paralysis has almost entirely disappeared from the arm, and the pressure upon the thoracic duct is evidently much less, as the patient has gained considerably in weight. His general health is good, though the left arm is slightly œdematous, from pressure upon the subclavian vein. The tumor is at least one-third smaller than when the operation was performed. It is hard to the touch, and is evidently being rapidly absorbed.

This case is a remarkable one, showing as it does the benefit of surgical interference in a condition almost hopeless. Hitherto, cases involving such extensive disease of the artery, have usually terminated fatally. The Hunterian, or proximal operation, was deemed impracticable on account of the deep situation of the healthy portion of the vessel, and the large size of the tumor, which of itself would have proved an insurmountable obstacle, covering as it did the route by which the vessel might have been reached in a case not involving so great a degree of disease of the artery. Galvano-puncture and the distal ligation remained as the last resort. The latter was chosen with the view of resorting to the galvano-puncture if Brasdor's operation failed. It happily succeeded, which with a former case of Professor Toland's, are the only successful cases recorded of the distal ligation for the cure of subclavian aneurism. Gross has collected twelve cases of ligature of the subclavian artery in the first portion of its course, and seven cases of the distal ligation of various arteries for the cure of subclavian aneurism.

[The cases are presented in the following tables, modified from Gross' *Surgery*:]

PROXIMAL OPERATION.

No.	Operator.	Age.	Result.
1	Colles.....	33	Death from hemorrhage on 4th day.....
2	Mott.....	21	" " " " 18th day.....
3	Hayden.....	57	" " " " 12th day.....
4	O'Reilly.....	39	" " " " 13th day.....
5	Liston.....	32	" " " " 36th day.....
6	Auvert.....	..	" " " " 22d day.....
7	Auvert.....	..	" " " " 11th day.....
8	Rodgers.....	42	" " " " 15th day.....
9	Parker	32	" " " " 42d day.....
10	Bayer.....	21	" " " in 24 hours.....
11	Partridge....	38	" " pleuritis on 4th day.....
12	Arendt.....	..	" " exhaustion on 5th day.....

DISTAL OPERATION.

No.	Operator.	Artery Ligated.	Death from hemorrhage.
1	Butcher.....	Carotid	Death on 4th day.....
2	Dupytren....	Axillary.....	" " .....
3	Schuh.....	Axillary.....	" " .....
4	Canton.....	Axillary.....	" " .....
5	Petrequin....	Axillary.....	" " 12th day.....
6	Liston.....	Carotid	" " 13th day.....
7	Cuvellier	Carotid	" " 10th day.....

It will be seen from these tables that death resulted, in seventeen out of nineteen of these cases, from hemorrhage, the seat of the hemorrhage being, in nearly every instance, at the distal side of the ligature. It seems reasonable to suppose that this accident might have been avoided in at least some of the cases, if the double ligature had been used. In single ligation the proximal side of the vessel does not generally slough, because the point of ligation is at the junction of the sheath and artery, thus leaving the nutrition of the vessel uninterfered with. The sloughing occurs on the distal side of the vessel; and as that end of the artery remains patulous, hemorrhage is the result. The reason for this is apparent, when we consider that the denuded portion of the artery is deprived of its channels of nutrition through the vasa-vasorûm, to an extent

varying with the degree of laceration of the sheath. This result is well illustrated in two of the cases given in the tables above, in which the subclavian was tied on the inside of the scaleni muscles. The first was the case of Dr. Rodgers, in which death occurred on the fifteenth day from hemorrhage. The other was the case of Professor Parker, death resulting from hemorrhage on the forty-second day. The following account of the dissection of these two cases is from Gross' *Surgery*, vol. i., p. 772:

"On dissection the wound was found filled with clotted blood, beneath which the artery had been completely divided by the ligature, which lay close by. The stump of the sub-clavian between the aorta and the point of ligation was about an inch and a quarter in length, and thoroughly impervious to air and liquids, its cavity being occupied by a solid and firmly adherent coagulum. The *distal* extremity of the subclavian contained a soft, imperfect clot, while the vertebral artery, which was given off immediately at the sight of the ligature was almost patulous and had evidently been the seat of the hemorrhage which caused the patient's death. The aneurismal sac, the size of a small orange, was completely blocked up with coagula.

In reflecting upon this interesting case, Dr. Rodger's regretted that he had not secured the vertebral artery and also the thyroid axis, believing that this would have effectually prevented the hemorrhage. Professor Willard Parker, acting upon this suggestion, in September, 1863, tied the left subclavian artery on the inside of the scalene muscles, along with the common carotid and vertebral on account of subclavian aneurism. The case progressed well until the tenth day, when there was a slight hemorrhage. The ligature separated from the vertebræ on the twelfth day, from the carotid on the fourteenth, and from the subclavian on the twentieth day. Death occurred at the end of the sixth week from hemorrhage of the *distal* side of the subclavian."

When the double ligature is practicable the advantage is that the denuded portion of the artery between the two

ligatures sloughs without leaving either the proximal or distal side of the vessel patulous. thus securing all the advantages to be gained by ligating the vertebral and thyroid axis separately.

The Galvanic Cautery as a Bloodless Method of Surgical Operating.

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Since the confirmation of the advantages of the use of Esmarch's bloodless method in surgical operations, I desire to present a few cases by a procedure and method which I may justly claim as being entitled to the character of being bloodless.

At a meeting of the New York Academy of Medicine last Winter, at which I was present, Dr. O'Byrne, of Brooklyn, exhibited an apparatus which he had devised for the electric cautery, and had used most successfully in uterine surgery. I had several patients under my care at the time suffering from hemorrhoids, fistulæ in ano, and other surgical diseases of the rectum ; one case in particular, on which I dared not operate, on account of age and general debility. My friend, Mr. M. Emmett, M.R.C.S. Eng., then in New York, and who happened to be with me when Dr. O'Byrne introduced his ingenious and original apparatus, gave me such a glowing account of the use of the galvanic cautery in surgical diseases of the rectum, as practised by Mr. Bryant, of Guy's Hospital, London, that I determined to test its merits the first time opportunity might offer ; and the following is the result.

CASE 1. Mr. Van B., a diamond merchant from Amsterdam, æt. 67, was returning to his home, after having made a visit to his family in Boston. Consulted me for

piles while in New York, prior to his departure for Holland. The patient told me he had used a number of ointments, some of which, he said, had relieved him temporarily. The disease had been troubling him for twenty-five years; but his long journey of late had so aggravated his sufferings that he came to me, resolved upon undergoing an operation. I proposed the operation by the galvanic cautery to him, to which he assented. The patient was well nourished, and had enjoyed excellent health, and complained of nothing but the hemorrhoids. He was considerably weakened from loss of blood, as he could hardly stand, or walk, without profuse hemorrhage. I asked my friend, Dr. E. Peugnet, of New York, to see this case with me; but, owing to illness, he failed to meet me; and Mr. Emmett very kindly assisted me in the operation. The bowel was well brought down, the portion to be removed clamped, and cut off by scissors, and the cautery then applied, the stumps being freely burned down to a line with the clamp; the soft parts were well protected by pieces of wet lint. The cautery was heated to a red-hot, and there was no bleeding. The clamps were removed, and the projecting bowel returned. The patient was under the influence of ether, and complained of but little pain after the operation. On the fourth day, his bowels were moved by a simple enema, and in three weeks he was on his way home.

CASE 2. Nathalie P., æt. 24, consulted me on the 3d day of June for a growth about the anus, which gave her much annoyance, but slight pain. She told me that she did not suffer much when at stool, and only passed blood when her bowels were greatly constipated. She could walk a moderate distance without suffering much; but she had been unable to ride in a carriage with comfort for a long time. She confessed to having had syphilis when at home in France, and had been treated for the disease in the Luercine Hospital, Paris. Her general health was as good as could be expected in a patient of her character. She had been married, but had no living children. On

examination, exposing the parts well by means of the speculum, I found a number of small vascular, strawberry-like looking tumors. I applied the cautery directly to the growth, and the patient complained only of slight pain on recovering from the anæsthetic. On the third day, her bowels moved naturally, and she is now perfectly well.

CASE 3. Michael G., a truck driver, came to me with a fistula in ano, which, he told me, had existed for four months. He was a fine-looking, healthy Irishman, denied all venereal taint, confessed to occasional sprees, but declared he had never had a severe attack of illness in his life that he remembered. I operated on this person by means of the galvanic cautery. I first passed a probe through the fistula, then a platinum wire through the sinus, in this manner bringing one end of the wire out through the anus, and the other through the buttock. I then heated the wire, and divided the tissues by traction upon it. There was no bleeding, and but moderate pain. The patient was not under the influence of any anæsthetic. The wound was dressed in the ordinary way. The bowels were moved by an enema on the fourth day, and the man was up in about three weeks' time.

The advantage of the galvanic cautery over the older methods of procedure, as illustrated in these cases, certainly shows that much painful suffering is saved the patient, and that the operation, when properly performed, is entitled to claim the character of being bloodless.

SAN FRANCISCO, 607 Bush street, June 18th, 1874.

RATIONAL MEDICINE WELL DEFINED.—The Italian journals relate that a vice-professor of the Faculty of Medicine of Naples, having asked permission of the Faculty to open a course on Homœopathy, received the following answer: "The Faculty could not grant the authorization, seeing that rational medicine, which is taught on the basis of natural sciences, excludes allopathy, as well as homœopathy, and, indeed, all absolute systems of medicine."—*The Lancet*, December 13th.

Surgery.

Early Signs of Urethral Stricture.

Dr. Fessenden N. Otis, in a paper recently read before the New York Medical Journal Association, and published by our able contemporary, the New York *Medical Journal*, thus speaks of certain matters connected with the urethra and its strictures :

Chronic urethral discharge, commonly called gleet, is the signal which nature hangs out to notify the intelligent surgeon that an obstruction to the normal working of the muscular apparatus of the urethra has occurred; that plastic material, laid down in the antecedent inflammatory condition, has begun to contract the normal urethral caliber, whether it be twenty or forty millimetres in circumference, and that nothing short of a complete restoration of the normal caliber of the canal will afford a permanent cure. Sandal-oil may stop it for a time ; injections of innumerable variety may, any one of them, temporarily remove it ; but a little vinous or venereal excess will reproduce it; and thus the case goes on until finally an attack of *retention of urine* calls attention to the fact that the patient has strictured urethra.

To prevent the return of stricture after operation, the stricture must first have been thoroughly sundered at some point ; that those strictures which have been *permanently cured* (and in this number I do not include those facetiously termed *cured* where the patient is obliged to use or have used a sound every two weeks for the balance of his life, but those that never reappear after operation) have been so sundered, either by rupture through dilatation more or less rapid, by divulsion, or division. The reason why the treatment of stricture after the usual methods is imperfect —that there is always a tendency of the stricture to return —arises from the fact that, as in the case cited, the strictures were not *completely sundered* at any point— that they were *distended*, not *completely divided*. All urethral strictures are composed of elastic tissue, and any operative procedure that falls short of *complete* division of the constricting band *can never produce more than temporary results*. As long as No. 8 of the English and No. 21 of the French scales are accepted as representing the *normal*

caliber of the human male urethra, and as long as *curative* treatment ceases when this caliber has been reached, there will never be a *radical, permanent cure of urethral stricture.* Sooner or later, however, it is certain to be accepted that urethræ vary in size in different individuals just as widely as any other constituent portions of the human body, and that consequently stricture of the urethra is a *relative term;* that while No. 8 bougie English or No. 21 French will determine the presence or absence of stricture in the urethra of corresponding caliber, it fails to recognize stricture in urethræ of larger size, and which has been positively demonstrated in certain cases to reach as high as thirty-six or even forty millimetres in circumference; and that *complete* division of stricture, *of whatever caliber,* having been accomplished, *recontraction may be prevented,* and that thus strictured urethræ can by appropriate treatment be with certainty restored to their normal dimensions without fear of subsequent recontraction. This I do not assert unadvisedly or rashly, as the records of more than fifty cases occurring in my own experience will demonstrate. Several of these cases, in which five or six strictures were present two years ago, and then thoroughly divided, have been carefully examined by me within the last month, and can be shown to-day free from the *slightest evidence of recontraction.* This goes far to prove that complete division of stricture, with appropriate after-treatment, will give complete immunity from recontraction. The results of operations with the *dilating* urethrotome, presented by me to the profession at a meeting of the New York Medical Journal Association more than a year ago, have remained permanent; that is to say, *that the strictures operated upon, having been thoroughly divided, were afterward completely absorbed.*

Stricture completely curable.—Dr. Otis wishes to be distinctly understood as claiming that "stricture, as ordinarily met with, *is absolutely within the reach of curative measures;* that if completely divided, and this division maintained by suitable means until healing of the parts has occurred, no *recontraction* can ever take place; that dilatation, temporary or permanent, *is never more than a palliative measure,* unless carried to a point sufficient to *completely rupture the stricture;* that the division of stricture is not more hazardous, to say the least, than permanent dilatation—that is, by introduction of dilating instruments, which are required to remain *in situ* for hours and days—or than rapid dilatation, which requires instruments of increasing sizes to

be introduced at one sitting; and, I may venture to say, scarcely more likely to produce trouble than temporary or transient dilatation, as usually practiced by surgeons, which is simply to pass a sound or bougie gently through the urethra, and to be immediately withdrawn; the same to be re-introduced, at intervals of two or three days or weeks, for the rest of the natural life of the unfortunate patient."

Dr. O. then concludes with the following: "1. Stricture may be present before difficulty in urinating occurs. 2. It is always present when *gleet* is present—*gleet, as a rule, means stricture.* 3. Dilatation of strictures is, at best, but a temporary expedient; valuable in close stricture, where urination is interfered with, and the stricture is too close for the introduction of instruments for completely dividing it; but dilatation is not only without permanent value except in such cases, but *it is pernicious*, inasmuch as, while it is never curative, it takes the place of curative measures. 4. Nothing short of complete division of strictures can ever result in radical cure."

PARALYSIS OF THE HAND AND FORE-ARM CAUSED BY ESMARCH'S BLOODLESS METHOD.—Dr. Robert Weir reports the case of a young man in whom it was found necessary to remove some dead bone from the elbow-joint. Esmarch's bandage was applied, the rubber cord of the diameter of one-quarter of an inch being, as usual, tightly drawn three times around the limb at the junction of the upper and middle third of the arm. The compression was continued about three-quarters of an hour. After the inflammatory reaction of the wound had passed away, it was found that the patient was unable to flex or extend any of the fingers or the hand on the fore-arm. He complained of numbness on the tips of all his fingers, of the palm, and anterior surface of the fore-arm. The lesion was mainly confined to the median nerve. This condition remained unchanged for some time, but he afterwards rapidly regained the use of the affected muscles under the application of the galvanic current.—*The Medical Record*, May 15th, 1874.—*Philadelphia Medical Times.*

STEADY work is the best preservative of health.

Institutes and Practice of Medicine.

Pulsation of the Subclavian as a Sign of Superior Dilatation of the Aorta.

Contrary to what is observed under normal conditions, there may be noticed under certain cardiac affections peculiar pulsations in the carotid region, and at the base of the neck. That these pulsations originate in the passage of the blood-current through a large artery—the subclavian—may be shown in two ways: first, by placing the finger back of and below the tubercle of the scalenus anticus muscle, when this artery will not be found in its usual position; then by making compression over the seat of pulsation, when the pulse at the wrist is affected. If on making this compression over the misplaced subclavian the arterial walls are lightly impressed by the finger, a double vibratory tremor may be remarked. The first and most intense part of this is systolic, and is evidently produced by the rapid centrifugal passage of the blood-current. The second, of variable intensity, is caused by the return of the blood towards the heart; it is sometimes wanting.

Auscultation over the seat of pulsation demonstrates the existence of a double blowing murmur, evidently connected with the vibratory tremor above mentioned. The second part of this murmur is wanting when the second part of the tremor is absent.

In a number of autopsies of such cases, the existence of aneurism affecting the superior wall of the aorta was ascertained. In these cases the subclavian was found displaced, and overlapping to a certain degree the omo-hyoid muscle. It is at first uncovered behind the clavicle, and then becomes more superficial. Finally, it is sinuous—that is, too long for its channel.

The double tremor and murmur appear to be independent of any abnormal condition of the aortic orifice. The fact appears to be that the walls of the dilatation, true or aneurismal, having lost their elasticity, allow themselves to become distended under the influence of the ventricular wave at the same time as the arterial system. But, owing to the impulsive force of the heart having been exhausted by the inertia of these walls, the arterial tension is lessened.

The diastolic reflux of a part of the contained blood results of necessity from this unequal subdivision of the

blood-tension. It is the centripetal reflux which determines the diastolic murmur. The displacement of the subclavian is evidently due to elevation of the superior wall of the aorta. It is shown in the shortening of the course of the carotid and other vessels given off, causing them to become sinuous, and thus to give rise to the pulsations noted. If the aortic dilatation is equal over all parts whence the great vessels are given off, the various phenomena alluded to will be observed equally on both sides of the neck. If, on the contrary, it is greater near the aortic origin, or on the other extreme of the arch, pulsation, etc., will only be observed on the affected side.

We have here, then, a valuable aid in the diagnosis and prognosis of superior aortic aneurism. For not only may the extent and position of the enlargement be ascertained approximately, but if in the progress of the case the vibration and murmur should disappear, we may hope that the aneurismal pouch is being filled with clots.—*From Archives General*, 1874.—*Translated by A. V. H.—Medical and Surgical Journal.*

Copaiva in Croup.

In the *Transactions of the Medical Society of the District of Columbia*, Vol. i, No. 1, after relating a case, Dr. Lincoln wished to draw attention to a very important remedy in the treatment of croup, copaiva, which he considered of the greatest use in this and similar cases. Thought it prevented the reformation of false membrane. On the night referred to in the report, when he removed the second specimen, he found the child as bad as ever, laboring under dyspnœa, from false membrane in the air tube. He removed the inner canula, but found no membrane in it. Sent for copaiva, and in the meantime applied a mixture of copaiva and glycerine (of which a small quantity was in the house) to the inner canula, which he then reinserted. This produced a paroxysm of cough, and a piece of membrane was thrown out. He afterwards gave one drachm of copaiva, with prompt relief. Since then had applied a mixture of copaiva to the inner canula with great benefit, according to the statements of the parents. There was still some patches of membrane about the palate. Has seen the efficacy of copaiva in many cases; in one, a case

of very severe membranous croup, a full dose of one drachm would again and again relieve the urgency of the symptoms, and the child recovered. He would have performed tracheotomy in the case but for an existing vitiated condition of the system.

As to chloroform, Dr. Lincoln considered that in Dr. Walsh's case no danger need have been apprehended from the anæsthetic, as instruments were at hand ready to open the trachea at any moment. He thought, however, the apparent final success was due to the copaiva.

Dr. Miller had used copaiva extensively in croup for thirty years, and had before spoken of its efficacy in the Society. Was in the habit of placing a bottle of balsam copaiva in possession of all his patients subject to croup, directing them to take doses of twenty or thirty drops before sending for medical aid. The result was that whilst he used to be frequently called out at night to attend croup cases, he was now but seldom annoyed at night by similar calls. So great was the faith of his patients in this remedy that he had often been applied to for his so-called "croup medicine." It was especially valuable in the early stage.

Dr. Lincoln had never seen copaiva fail if given in the first stage of the disease, and had derived great benefit from it in every period of the complaint. In reply to a question by Dr. Fenwick he said the remedy was of great use even in the pseudo-membranous form of croup.

Sulphur in the Treatment of Acne.

Dr. Sidney Ringer says (*The Lancet*, February 21): "The topical effects of sulphur ointment, or, of an iodide of the hypochlorite of sulphur, or, still better, of the iodide of sulphur of the Pharmacopœia, is most marked on *acne indurata* and acne rosacea, these effects being twofold, and even opposite, according to the stage of the eruption. If applied at the very commencement of the eruption, as soon as the little hard knot is felt under the skin, further development is arrested, and the hardness speedily disappears. For instance, if smeared over the hardness just before going to bed, in the morning scarcely any induration will be felt, though after a time, perhaps, from exercise or

the irritation from washing, much of the hardness may return, to be again removed by a new application of the ointment, so that in two or three days a papule that threatened to become of considerable size may be completely dispersed.

When, however, the nodule has advanced further, and suppuration has set in, then the effects of the ointment are much like those of the sulphides, administered internally, on boils, hastening maturation, limiting the swelling and hardness, and thus considerably curtailing the duration of the eruption. Aye, further, if rubbed over the skin, it appears to check the formation of acne spots. If rubbed over the nose and neighboring parts of the face in acne rosacea its effects are often most striking. Not only does it act as in acne indurata, but the hardened, swollen tissues become softened and reduced to a more natural state. He has found the iodide of sulphur likewise useful in bromic acne, reducing the eruption, or at least considerably reducing the size of each spot. In acne the ointment should be thinly spread over the eruption, night and morning.—*The Medical Record.*

On Sulphide of Potassium, Sulphide of Sodium, and Sulphide of Calcium.

Dr. Sidney Ringer speaks enthusiastically of the influence of these remedies upon the suppurative processes, such as abscesses, boils, and scrofulous sores. When sulphide of calcium or potassium is administered, a thin, watery, unhealthy discharge becomes at first more abundant, afterwards diminishing, and throughout continues thicker and healthier, possessing, indeed, the characters of "laudable" pus. The condition of the sore improves correspondingly and its healing is promoted. The sulphides appear, often, to arrest suppuration, serving to reduce inflammation, and avert the formation of pus.

The effects of these remedies are equally conspicuous in mammary abscesses, although in rare instances they appear temporarily to increase the pain—a remark which seems, sometimes, to hold good with respect to boils. But, as a rule, the pain is speedily mitigated. Singular to say, he has found these remedies of much less use in forwarding

the maturation and expulsion of pus in indolent tumors. For the relief of boils and carbuncles, the tenth of a grain of sulphide of calcium, given every two hours, generally prevents the formation of fresh boils, while it lessens the inflammation and reduces the area of existing boils, and quickly liquefies the "core," so that its separation is much more speedy than usual. In some cases of deep-seated boils and abscesses of diabetes they are powerless.

A very beneficial effect appears to be exercised upon suppurating scrofulous glands in the neck. Here again they hasten the elimination of the pus, and subsequently the cheesy, scrofulous matter.—*The Medical Record.*

Chloral Hydrate and Camphor as a Local Application in Neuralgia.—It is stated that the intimate mixture of equal parts of chloral hydrate and camphor will produce a clear fluid which is of the greatest value as a local application in neuralgia. Mr. Lenox Brown relates (*Brit. Med. Journ.*, March 7, 1874) that he has employed it, and induced professional friends to do so; and that in every case it afforded great, and in some instantaneous, relief. "Its success does not appear," he says, "to be at all dependent on the nerve affected, it being equally efficacious in neuralgia of the sciatica as of the trigeminus. I have found it to be of the greatest service in neuralgia of the larynx, and in relieving spasmodic cough of a nervous or hysterical character." It is only necessary to paint the mixture lightly over the painful part, and to allow it to dry. It never blisters, though it may occasion a tingling sensation of the skin. He has found it also an excellent application for toothache.—*Medical News.*

Treatment of Pityriasis Rubra.—Dr. Tilbury Fox believes that in cases of pityriasis rubra—hyperæmia of the skin and exfoliation of the cuticle—the free use of diuretics is called for, especially in cases which come under observation at an early date, before the hyperæmic state of skin has given rise to secondary alteration, such as infiltration into the tissues. It is an established rule in renal therapeutics to stimulate the skin to increased action in cases where the kidneys are congested, or in other conditions in

which it is desirable that they should be given rest from work. In the case of a hyperæmic state of the skin, where this hyperæmia is not removable by local remedies, and where it is extensive, it is likewise desirable to stimulate the kidneys to increased activity, to relieve the skin of its work,—to give it rest. Dr. Fox uses a diuretic mixture composed of half a drachm each of acetate and bicarbonate of potassium, one drachm of spirit of juniper, and one ounce of infusion of columba, for each dose, three times daily. The skin is soothed by oily inunctions, and perchloride of iron is administered internally to act as an astringent to the weakened cutaneous vessels.—*The Lancet*, February 28, 1874.—*Medical Times.*

SCIATICA PROMPTLY CURED BY CROTON CHLORAL HYDRATE.—Dr. R. W. Falconer, of Bath, relates the following case: "A lady, æt. 50, of rheumatic diathesis, was suddenly seized with sciatica. The pain was most severe. Two grains of croton chloral hydrate, with enough extractum anthemidis to make a pill, were given. Half an hour after taking the pill, the pain had ceased; there was a very slight return afterwards. With the beneficial effect of the croton chloral hydrate, there was 'some confusion of head, and near objects appear distant.' She had no pain the following day until the evening; then a sharp attack occurred. Half a pill was given at once, and in twenty-five minutes the pain was gone. She had 'slight confusion of head; no alteration of vision.' There has been no recurrence of sciatica since. The first attack occurred fourteen days ago."—*British Medical Journal*, February 28, 1874.

THE INDIAN CINCHONA BARK.—At a late sale in London, part of a lot of moss crowned bark (Cinchona officinallis) the product of the plantations of the Neilgherry Hills, a range of mountains near the western coast of India, where the cinchona-tree has been for several years under cultivation, brought the great price of 5s. 9d. per pound. This is about $1.40, gold rate. The whole amount disposed of on the occasion referred to was 23,646 pounds, at an average price of about seventy cents.

Gynecology and Diseases of Children.

Retro-Uterine Hematocele and its Treatment.

In a short space of time four women afflicted with retro-uterine hematocele have been observed in the service of Dr. Siredey at the Lariboisiere Hospital.

Effusion of blood in the retro-uterine cul-de-sac of the peritoneum is a somewhat rare disease and often difficult to differentiate from pelvi-peritonitis ; it is not, therefore, useless to insist on some very important points in diagnosis. Ordinarily the patients do not present themselves at the hospital until some days after the beginning of the accident ; therefore the symptoms of peritonitis predominate. Here, as in pelvi-peritonitis, we find with the normal distension of the belly, fever, and great sensibility in the sub-umbilical region.

Abdominal palpation and vaginal and rectal examination show the presence of a tumor. Constipation and difficulty of micturition exist, and sometimes even retention of urine. None of these signs permit of the differentiation of hematocele from pelvi-peritonitis unless one makes a minute inquiry into the antecedents. One must not forget that in hematocele, as in pelvi-peritonitis, the tumor which is seated in the pelvic cavity is but the second act of the evolution of the disease, and that it may be encountered with nearly similar characters.

In hematocele the onset is sudden and occurs ordinarily in good health. All of a sudden a sharp pain is felt in one or other hypogastrium, without previous shivering, and without it having been preceded by malaise. Almost at the same time as the pain, a general weakness comes on, with swooning, and it may be that there is fainting in grave cases ; one observes also pallor of the face and coldness of the extremities. These are the symptoms of internal hemorrhage.

At the onset of pelvi-peritonitis, on the contrary, we have shivering, elevation of temperature, in a word, a febrile state; when this comes as a complication of an anterior state, the patient has lately been delivered, or is about to miscarry. She presents the characters of acute or chronic phlegmasia of the genital organs.

But as the blood effused into the peritoneum provokes peritonitis, the symptoms resemble one another, and commonly the two diseases are confounded.

Nevertheless, there are differential signs of a certain value which, conjoined with commemoratives, permit us to arrive at a diagnosis.

In hematocele the tumor is soft and fluctuating at first, and gradually becomes harder; above all, it develops posteriorly.

In pelvi-peritonitis it is harder at first, softens subsequently, and, above all, develops at the sides, particularly of the left, of the uterus.

The tumor of hematocele is much more voluminous, pushing and raising the uterus, the neck lying behind the pubis. In pelvi-peritonitis the tumor, less voluminous, does not displace the uterus, but surrounds and fixes it in its ordinary situation.

Owing to the considerable displacement of the uterus, the urethra takes a vertical direction, so that it is very difficult to practise catheterism. The bladder and rectum are subjected to very marked compression. Lastly, when the resolution of the sanguineous tumor is effected, it takes place much the most rapidly.

These different signs could be appreciated in all four patients. In two of them the disease terminated by evacuation of the sanguineous pouches. In these two cases the evacuation was preceded by rectitis. In one case in particular the violent pains, the tenesmus and flow of mucus, showed pretty plainly the opening of the collection into the rectum. In the second patient, after the opening of the collection into the rectum, a rectal fistula was established, whence pus flowed in an intermittent manner; the general state became bad, the patient lost appetite, was taken with diarrhœa and daily fever. She was sent into the country, where she gained appetite and strength, but she still loses pus from time to time and is not cured. In the other two women resolution was rapid enough, and both left the hospital in good condition.

As regards treatment, the advice of authors varies greatly. The first indication is beyond dispute to arrest hemorrhage, then to seek resolution. At first in his patients Dr. Siredey did not prescribe bleeding; they were so anemic that bleedings were decidedly contraindicated. Absolute rest and ice to the abdomen and internally should be administered as long as a return of hemorrhage is to be feared; then tonics, brandy and wine. The functions of the rectum and bladder should be watched with care.

Later in the development of inflammatory accidents:

Neapolitan belladonna ointment, blisters, purgatives, and it may be iodide of potassium and alkalies as resolutives.

Ought one to seek to evacuate the sanguineous collection by direct surgical intervention? It was much extolled some years ago, but now-a-days those who much advised the operation have returned to their previous opinion. Dr. Siredey, for his part, in a considerable number of cases has never seen that it was necessary, and has found the therapeutic measures we have indicated sufficient. The opening of a voluminous collection of blood is to be dreaded for many reasons, though when it does not give rise to accident, it may be followed by a rapid and brilliant cure, as he has once seen in the service of Dr. Guyot, at Saint Antoine. A goodly number of cases terminate by resolution; it is then useless to evacuate; at other times, when suppuration occurs, one is always master of action or expectation. — *Journal de Medicine et de Chirurgie*, March, 1874.

Intra-Uterine Medication—A New Applicator.

BY H. E. WOODBURY, M. D., WASHINGTON CITY, D. C.

In the *Medical Times* of April 4, 1874, "Subscriber" expresses his conviction that by Dr. Goodell's method applications cannot be made to the cavity of the uterus. After a careful perusal of Dr. Goodell's papers, I fully concur with "Subscriber" in his belief that before the mop reaches the fundus the fluid it contained will have been passed out and taken up by the cervix.

Since the publication of my article in the *Medical Times* (April 26, 1873), "A New Instrument for treating Diseases of the Neck and Cavity of the Womb," I have been studying this subject carefully, with the view to construct an instrument by means of which applications may be made to the uterine cavity, thoroughly, effectually, and to which the objections entertained by many as to intra-uterine injections may not apply.

While my experience with the uterine injector referred to above has been extremely satisfactory, I have been anxious, if possible, to improve upon that method, and

now present to your readers, and to "Subscriber," a safe and sure instrument for the accomplishment of the desired end.

My instrument, the applicator, very much resembles the injector in shape, so far as the glass tube is concerned, the only difference consisting in this, that in the applicator the openings of both terminal extremities are of the same diameter, while in the injector one of these is capillary. The edges of these openings are well rounded by heat.

Through this tube I pass a piece of steel wire about two inches longer than the tube, the temper being moved from the last two inches of this, so as to permit of its being bent to any desired curve.

The instrument is used as follows. We first moisten the end of the wire, and wrap closely around it just enough of cotton to admit of its being drawn back into the tube without difficulty. The cotton is then dipped into fuming nitric acid, tinct. iodine, strong solution of carbonic acid, or any other fluid we may select, and withdrawn into the tube. The end of the tube is well wiped, and through the speculum introduced into the womb, dilatation of the ostium internum being sometimes necessary, in order that the tube may be passed. When the tube has entered as far as is necessary, we gently push the mop into the cavity. Thus it will be seen that our remedial agent is entirely under our control, and the cotton is not "*squeezed dry*" by coming in contact with the mucous surface of the cervix, as in Dr. Goodell's method.

If deemed desirable, a few drops of the fluid may be drawn into the tube, if we wrap enough of cotton on the end of the wire to make it act as a piston. This will flow out slowly, guttatim, when the wire is pushed in, and not with the force of an injection.

I have used the applicator in several cases, with entire success. No unusual irritation has attended its use. The introduction of the solid nitrate of silver, as recommended by Goodell and others, into the uterine cavity, is often attended with unpleasant results. The chemically-pure nitric acid applied by my method seldom occasions any other sensation on the part of the patient than a feeling of warmth in the organ, and the promptness with which the symptoms yield to this mode of treatment is in the highest degree satisfactory. I feel confident that in this instrument the desideratum has been attained, and that the profession, after a fair trial, will give it their unqualified approval.—*Medical Times.*

Thermometry of the Uterus and Its Diagnostic Signification.

It has been stated that in some cases in which doubt existed as to the life or death of the fœtus, assistance was rendered by the use of the thermometer, and lately the assertion has been made that the scale of the thermometer would reveal the existence of pregnancy even in the earlier months. The two suppositions which follow give the basis of this statement; 1, that the temperature of the fœtus is higher than that of the mother; and 2, that the temperature of the pregnant uterus is higher than that of the vagina, this difference being due to an increment of heat produced and furnished by the fœtus. Schroder found a difference of o.156° Centigrade between the temperature of the pregnant uterus and the vagina, while in similar observations of Winkel, a variation of o.13° to o.16° Centigrade was observed.

If the fœtus dies in the uterus, not only is its influence as a source of heat done away with, but heat from the uterus is absorbed by the dead mass within. Schroder further noticed that in pregnant women the temperature of the uterus exceeded that of the axilla by o.29° Centigrade and in women in labor the difference amounted to o.38° Centigrade; in the case of one woman in labor whose child had died seventeen hours previously, there was a difference of but o.02° Centigrade in temperature in favor of the uterus. From these results, when there was but a slight or no difference of temperature between the axilla and uterus, it would be inferred that the death of the fœtus had occurred. Schlesinger by his investigations had been led to quite different conclusions. He began his studies with the conviction that no conclusions could be drawn from the higher temperature of the uterus until it was established that it was due to pregnancy. And he endeavored to ascertain the variations in temperature between different parts of the body in women who were not pregnant. In ascertaining the temperature of the uterus, thermometers were used which conformed in shape to the curve of the pelvis, and, to avoid accidents from breaking, the instruments were enclosed in a silver sheath perforated with many holes. From his numerous observations Schlesinger concludes that the temperature of the non-pregnant uterus is on the average 0.19° Centigrade higher than that of the vagina, a difference corresponding very closely

with that given by Schroder and Winkel as existing in pregnancy.

These results agree fairly with the ideas which prevail at present in regard to the production of heat in the animal economy. A muscle such as the uterus could not be inactive in this respect. It must also be remembered that organs which are supposed to be sources of heat are active in this respect proportionally to their size and labor. Theoretically therefore the uterus when actively engaged in expelling the fœtus should show a higher temperature than the same organ when at rest and quietly containing the product of conception.

Schlesinger does not wish to be regarded as asserting the contrary, but only that these differences of temperature cannot be used in making the diagnosis of pregnancy or of the life or death of the fœtus, since they exist as well in the non-pregnant woman.—*Wiener Medical Presse.*

On the Propriety of Administering Iron during Pregnancy as a Preventive of Post-partum Hemorrhage.

BY DR. BASSETT, OF BIRMINGHAM.

Regarding pregnancy as nature's highest physiological work, and one that ought to go on without trespassing on the domain of pathology, he had been led to observe that those who had severe floodings during labor were uniformly out of health, weak, dyspeptic, nervous, listless, and evincing an aversion to animal food. The tone of the muscular system was impaired, and the blood in a watery condition, leading to irregular or feeble contraction of the uterus and hemorrhage as a consequence. Iron in these cases had proved, in his experience, of great service in preventing post-partum hemorrhage, combined with potash where the urine was defective, or with soda if the liver seemed to be sluggish and the skin sallow, or with hydrochloric acid if the digestion was weak.

Dr. Barnes asked if any of the Fellows had ever seen any reason to suppose that premature delivery had been caused by the administration of iron? He thought we had not sufficiently ascertained the changes and diminution of vital force induced by pregnancy: a series of changes of

a most important kind occurred, and if we only understood these we might preserve our patients from the consequences. As a rule, pregnant women did not place themselves under treatment. He alluded to an instance where a pupil of his had given iron to a pregnant woman, who was in consequence accused of intending to produce abortion. Dr. Barnes himself had given it in dozens of cases, and had never witnessed any ill consequences, or instances in which abortion could be traced to its administration. He thought iron might safely be given where anemia was present during pregnancy to improve the patient's condition, and lessen the risk of hemorrhage during parturition.—*Obstetrical Journal.*

PRURITUS VAGINÆ.—The London *Medical Record* mentions that Dr. H. Clemens treats this obstinate affection by means of grooved metal bougies smeared with an ointment containing borax and lard in the proportions of one to three. Should he not succeed by this means, he uses the induced current of electricity, by passing a leaden bougie, smeared with the above preparation, into the bladder, to which he attaches one pole, while the other pole is applied to the nape of the neck; a gentle current of inducted electricity is transmitted for about ten minutes at a time. In pruritus vaginæ he passes one pole, with a sponge at the end, up the vagina, smeared with borax. He states that by this means he has cured the most inveterate cases in old women.—*Medical and Surgical Reporter.*

Ophthalmology and Otology.

Treatment of Otorrhœa.

M. Méniere, in the *Journal de Medecine*, translated in *The Practitioner*, says that:—In all cases of otorrhœa great attention must be paid to the constitution, so that scrofula, syphilis, or other constitutional diseases should be treated by appropriate general measures. In this lies an essential element of success in all instances. Systematic injections play an important part; they cannot do harm,

and they are almost certainly productive of immense advantages. Cleanliness is a capital point in the treatment of otorrhœa, and nothing is better for this purpose than pure warm water injected from the ordinary syringe with moderate force, the nozzle being placed fairly within the meatus. The caoutchouc pears may be used, but the stream they give is less continuous and strong than that from a syringe. In the early stage, and when the otorrhœa is accompanied by sharp pain, the treatment is but little different. A good injection is composed of warm decoction of marsh mallow, in which one or two poppy heads have been boiled; this may also be poured into the affected ear, the patient resting his head on the sound side. A leech or two may also be applied behind the ear, the second being allowed to attach itself to the same point seized by the first. The whole ear may be covered with a poultice of linseed meal on which a little laudanum has been sprinkled. M. Giampiétre recommends as a topical application the instillation into the meatus of two or three drops of a liquid containing one sixth of a grain of aconitia in one ounce of distilled water. M. Méniere rejects the instillation of laudanum, ether, or chloroform. He objects also to the instillation of oil of almonds, and similar fluids, so commonly employed; he thinks they often serve to aggravate the original evil. Where the pain is very intense he adopts the plan of subcutaneous injections of morphia, etc. Otorrhœa of old standing is more frequently complained of by patients than acute attacks; and in their treatment warm injections are always indicated. The fluid injected may be either pure water or a very weak solution of alum, one to five grains in two ounces. Solutions of sulphate of zinc and acetate of lead may also be used of the same strength. No other treatment will effect improvement, if injections, which remove pus and the secretions of the meatus, are neglected. A little piece of wool dipped in a weak solution of carbolic acid may be placed in the orifice of the meatus after each injection; a little weak solution of nitrate of silver may be employed in the same way, and may also be injected once a day, the ear having been first thoroughly cleansed by the injection of warm water, and dried by the subsequent introduction of a little warm dry wool. Neither of these topical applications, and especially of carbolized glycerine, is painful or harsh, as they simply cause a tickling sensation in the ear, and the secreting surface is thus modified without harm. M. Méniere frequently uses the following lotion, the ear having been previously injected with water and dried:

Water, 200 parts.
Glycerine, 100 parts.
Sulphate of zinc, 5 to 6 parts.

Another lotion, which may be used even when there is great vascularity at the bottom of the tympanum, is :

Acetate of lead, 5 to 15 parts.
Water, 300 parts.

In both cases a few drops may be allowed to remain in the ear for eight or ten minutes. By the use of these means it is not to be expected that every case of otorrhœa will be cured, but at all events the disease will be prevented from getting indefinitely worse, and the patient placed under the most favorable conditions for special treatment.—*The Medical and Surgical Reporter.*

Spontaneous Myosis.

Dr. Galezowski, in one of his lectures, describes an obscure affection of the eye which he terms spontaneous myosis or permanent contraction of the pupil. This affection, he said, is rarely met with in a separate or distinct form ; it is more frequently accompanied with tonic spasm of the accommodator muscle of the eye, and with certain disturbances in the function of vision.

These spasmodic contractions may be produced by hypodermic injections of morphia, as shown by Graefe, or by instilling into the eye a solution of eperine (the alkaloid of the Calabar bean) ; but, according to Dr. Galezowski's experience, opium or morphia will not produce myosis unless the quantity introduced into the circulatory system be comparatively large. He has observed that when opium is administered internally in ordinary doses, it has no effect on the pupil ; whereas, the hypodermic injections of morphia produced a marked effect, and the myosis lasts a certain time, extending even beyond several months. In these cases the functional disorder of the eye is due not to myopia, but to the spasmodic contractions of the accommodator muscle, which prevents the eye being fixed on small objects ; hence the fatigue and disturbance of vision.

A second variety of myosis is that which depends upon the nervous affection called hysteria. This form comes on suddenly, and may be produced by the slightest mental emotion. It is observed in nervous subjects, simultaneously

with other symptoms of nervous disease, whether of a paralytic or spasmodic character.

There is still another variety of myosis, and particularly that which is observed in locomotor ataxy. This is the symptomatic myosis of spinal affections. It is met with at a late period of these affections, with or without any lesion of the optic nerve, and is the direct consequence of alteration of the posterior portions of the spinal marrow, which become detached from the cilio-spinal region, and which, according to Budge and Claude Bernard, are situated on a level with the two last cervical vertebræ and the two first dorsal. The myosis of ataxics exists ordinarily in both eyes; but it may first appear in one eye, and only attack the other after several months or even years. Atrophy of the papilla (entrance of the optic nerve) in ataxic subjects, is frequently followed, after some time, by well-marked myosis which never disappears; but which, on the contrary, goes on increasing, according as the general affection (locomotor ataxy) progresses. According to Professor Sée, myosis in ataxic subjects may exist without atrophy of the papilla.

These different varieties of myosis were illustrated by cases, and Dr. Galezowski concluded by remarking that as the causes of this affection are various, the treatment must necessarily be directed against these causes. Thus, in toxic myosis (the first variety referred to) he has employed with advantage instillations of a weak solution of atropia into the eye, with belladonna pills and ferruginous preparations internally. In the hysterical form, he recommends Barége baths, blisters to the nape of the neck and along the spine, instillations of atropia into the eye, tonics, generous diet, absolute rest of the eyes, and moderate bodily exercise.—*Irish Hospital Gazette*, April 1st, 1874.

BROMIDE OF POTASSIUM AS A PROPHYLACTIC TO MERCURIAL PTYALISM.—Dr. M. E. Dozier says, in the *Journal of Materia Medica*, that experience with the Bromide of Potassium has induced him to abandon the chlorate of potash almost entirely, as the Bromide answers the purpose most satisfactorily. The latter not only relieves the irritating effects upon the mucous surfaces, but, in addition, induces soothing and quieting effects, which, certainly, are much to be desired.—*The Medical and Surgical Reporter.*

Editorial.

Sex in Education.

Of all questions affecting the interests of the masses, none is of so much importance or attracting so much attention at the present time, from a hygienic standpoint, as a proper adaptation of education to sex.

In the strong tide of public opinion which is setting towards our universities and governing their curricula, we are losing sight of the great physiological laws upon which health, life and perpetuity depend.

The cry of a class of women who have failed through various causes to perform those peculiar duties and functions which are hers; for the co-education of the sexes, is exerting too much attention, and through an innate desire to encourage progression, those who have the guardianship of our youth are being led astray, and will ere long fall headlong into the abyss of error, so deep as to require many years to extricate them, and to correct an evil that will certainly accrue to our educational system.

There is too much eagerness manifested to push our girls forward and have them attain to the rank intellectually of men. We show too much anxiety in this direction and an utter disregard of the anatomical and physiological facts which indicate that she was never designed by nature to be man's peer in this direction; indeed, there is too much desire to make her the competitor instead of the companion of man. It must be borne in mind that she has from six to eight ounces less brain matter, and that in order to compensate for this deficiency of nature, we are pushing her as a hot-house plant is pushed in its development, at the cost of her physical strength, and consequently the great physiological laws which are peculiarly hers.

We admit that there are in every community Amazons who in their general physical development seem to approach more closely the man than the woman. These may have their brains crammed and cultivated in every

direction with impunity and without reference to the physiological laws which belong to her sex; but by what right do we conclude that they should be taken as examples, and that the educators of the land shall be governed by their knowledge obtained through observation of such women?

But there is another view from which to consider this question: the moral influence of co-education.

What must, aye, what *is* the influence upon the sexual system of constant—or inordinate—excitement, at the period during which our girls and boys are receiving instruction; if not absolutely bad, morally considered, we insist that it is prejudicial to the *health* of the girl. The uterine system is kept in a state of engorgement which sooner or later will result in disease of the organs involved.

We admit that if it was possible to keep our girls and boys always children, or rather if we could educate them thoroughly before that period at which nature developes the peculiarities of each sex, then there would be some support for the attempts being made to co-educate; but, unfortunately this is impossible. The brain of neither is sufficiently developed to enable it to receive the higher education before the period of development of every other organ; hence the uterus, ovaries, etc., etc., are developed co-ordinately with the brain; and if the proper establishment of their function be interfered with, as in crowding the brain, thus abstracting nerve force from the sexual organs, of necessity disease in the inevitable result, and the fresh, blooming and promising young girl is blighted at the very threshold of womanhood.

What is to be the effect of these facts upon coming generations? Ye who are urging our universities to co-educate, consider well this question; take it to heart; ponder upon it, and we venture the opinion that if you be earnest and honest, the answer will be: *we are wrong!*

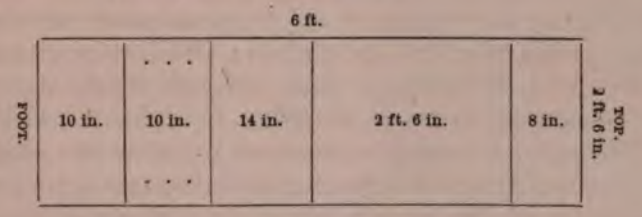
BE not overcome of evil.

Our Universal Operating Table.

We furnish in this month's issue of the LANCET a well-executed photograph of a table invented by us some years since, and which experience has proven to be the best that it has been our privilege to examine. Not only is it adapted to every operation in surgery or gynæcology, but its simplicity of construction and perfection of mechanism renders it inexpensive, and commends it to all.

The "American Medical Association," which convened here some three years since, expressed almost unanimously, its approbation of it, whether for use in the office or lecture-room.

It consists of an ordinary table frame, the top of which —or lid—is made up of five sections, an idea of which may be obtained from the diagram below:



The top can be covered with a thin movable cushion, say an inch in thickness, which will not interfere with its various movements or positions, and will make it quite sightly for office use. In the amphitheatre it may be placed on an iron rod, fixed to the floor and passing through a cross-beam between the side-rails of the frame; thus, with castors on the legs, it furnishes a much better revolving table than any we have seen, inasmuch that the four legs render the table more steady for operations than a mere central pedestal possibly could.

The first position shown in the photograph with the first segment of the top raised, adapts it to the use of gynecologists for uterine examinations. It will be noticed that two stirrups, attached to the top of the legs, afford rests for the feet. These stirrups move on a pivot, which

enables them to be turned in under the lid, when not required for use.

When the top of the table is flat or straight, the stirrups may be used for fixing the feet in the operation of lithotomy, or any other operation about the perinæum or lower extremities. For amputations the table may be used as any other, being of proper height.

The second position of the table, as shown in the photograph, is useful in operations about the rectum, fistula, hæmorrhoids, etc., and, indeed, in some operations upon the vagina.

The third position, as seen in the illustrations, is convenient for operations at the shoulder-joint, such as amputation; also, for all proceedings about the thorax. Whilst the fourth position is excellent for operations upon the larynx, head, etc., etc.

The first segment is worked by means of a spring fastened to the end rail of the table, and provided with a button-pull, which will be noticed; said spring acting on a steel rack, describing a segment of a circle, and screwed to the segment of the lid alluded to.

The other movements, or rather positions, are effected by means of two bolts between the third and fourth sections, beginning at the foot, which either stiffen the joint, or allows the hinges to act, and one bolt between the fourth, or greatest section, and the fifth, or last, at the head of the table, which either stiffens that joint or permits this section to fall partly back, so as to place the anterior part of the throat on the stretch, etc.

The fourth, or largest section, together with the fifth, is kept raised by means of two arms (wooden) at its back, which play in a rack of wood screwed along the inside of the side rails of the frame.

It will be noticed that the only segment of the lid that is permanent is the second section, which is screwed to the side rails of the table.

This is the whole contrivance—simple, universally useful and inexpensive. With this description we give it to

the profession, in the hope that it may be found all that we have claimed for it.

A New and Important Remedy.

Lactopeptine is the name given to a preparation manufactured by Reed & Carnick, of New York. It purports to be a combination of pepsin, ptyalin, pancreatine, lactic acid and hydro-chloric acid.

From this catalogue of components, we ought to expect the Lactopeptine to accomplish wonders. Surely it must be concentrated and solidified gastric juice ; and since the agents give instructions as to the means of testing its digestive power, as follows—to two fluid ounces of water add one drachm of Lactopeptine, half a drachm of hydrochloric or lactic acid, fifteen drachms of cooked food (reduced to a pulpy consistence), allowing it to remain from four to twelve hours, occasionally agitated and heated to a temperature of 105°—we think it should be fairly tried by the profession. As a rule, we do not advocate remedies presented in this guise ; but so much is claimed for it and its composition seems to be so excellent and well adapted to the treatment of the affection for which it is recommended, that we have been and shall continue to try it till satisfied either that it is what is claimed for it or that it is worthless.

Letter from Chambersburg, Pa.

We publish below one of many letters which we are monthly in the receipt of, and which will be as gratifying to the friends of the LANCET as to ourselves :

CHAMBERSBURG, PA., June 22d, 1874.

DEAR SIR:—Your valuable journal has been a companion to me for a year. It reached me first by chance, and its

interesting and instructive contents have afforded me much pleasure. For forty years or more I have been in receipt of most of our prominent Northern and Eastern periodicals, and to none have I been more indebted for solid and instructive medical literature than to the WESTERN LANCET. In renewing my subscription, please accept my best wishes for your prosperity, and allow me to express the hope that your new journal—born at the setting sun—may reflect its light far over the lands of the East, and diffuse knowledge, useful and pleasing, wherever it will do the most good. I hope that your subscriptions may be largely extended among my professional brethren of the Atlantic slope, and that they may fully appreciate your efforts in favor of the Medical Journal of the Pacific slope.

Very truly yours,

B. H. SENSENRY.

To R. Beverly Cole, M.D.

OUR arduous labors for several years past in teaching, writing, and the active practice of our profession, necessitates relaxation or rest; but as it is impossible to secure this without withdrawing from the field entirely, we have determined upon an European tour. With this number of the LANCET our labors, except as a contributor, will cease for several months. Meantime we are pleased to present to our readers the name of Professor A. B. Stout, M.D., who will occupy our chair, and who, for many years, has been a very prominent member of the profession, and is distinguished as a writer. A large practice, from which to draw material, and a long experience in writing, will render the administration of Professor Stout invaluable, and, we premise, will make the LANCET not only more acceptable as to its editorials, but more useful as a journal of reference.

We shall, during our absence, contribute monthly to the LANCET a letter, which shall be a mirror of what is new in the professional world abroad, or at least contain such new ideas as we may be able to glean, and as may seem of sufficient importance to be presented to our readers.

We bespeak for the LANCET in our absence that support from the profession in the direction of written contributions as has been hitherto extended to it whilst under our direction, giving the assurance to our friends that all matters of interest thus contributed shall receive attention.

With the confidence above expressed in the ability of our associate, we commit the LANCET to his charge, thanking our patrons for the encouragement we, during the past year, have been the recipients of, and expressing hope that the same may be extended to our colleague in our absence. It only remains for us now to say—for the present, at least—adieu!

IN the next issue of the LANCET we shall publish, from the pen of Dr. John Scott, of this city, an account of one of the most extraordinary cases of Ovariotomy that has ever occurred on this coast.

"SCHOOL-HOUSE VENTILATION."—In my estimation, no ventilation is good which requires the opening of doors and windows at any time. Window ventilation is often used in warm weather, but I consider it undesirable, because it admits insects, dust, and hot air; *i. e.*, air hotter than might be secured by properly arranged air-ducts, which may be so contrived as to introduce comparatively cool air. But window ventilation certainly should never be used in cold weather, while the scholars are not taking active exercise. It is never necessary in good ventilation.

Ventilation should, as far as possible, be automatic, and should be beyond control of every one except the person who has it in charge This self-acting ventilation may be secured by combining the ventilation system with the warming apparatus, so that the active condition of the warming apparatus shall necessitate an active ventilation; because we are much more sensitive to a change of temperature than we are to the stupefying influence of foul air.—R. C. KEDZIE, M. D., *The Sanitarian for February.*

Miscellaneous.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, April, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	299	40	27	7	7	15	6	S. F. B'd of Health.
Sacramento	24	5	4	0	0	0	0	Sac. B'd of Health.
Petaluma	6	2	0	0	0	0	0	Dr. G. W. Graves.
Dixon	0	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	14	0	1	0	0	4	0	Stockton B'd Health.
Marysville	11	4	2	0	0	0	1	Dr. A. B. Caldwell.
Placerville	4	1	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	2	2	0	0	0	0	0	Dr. T. C. Stockton.
Oroville	...	..	..	.	.	..	.	Dr. J. M. Vance.
Los Angeles	21	3	0	1	0	2	2	Dr. H. S. Orme.
Truckee	...	..	..	.	.	..	.	Dr. Wm. Curless.
St. Helena	1	1	0	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	...	..	..	.	.	..	.	Dr. M. B. Pond.
Watsonville	2	1	0	0	0	0	0	Dr. W. W. Ross.
Folsom	4	1	2	0	0	0	1	Dr. S. Lyons.
Santa Cruz	...	..	..	.	.	..	.	Dr. C. L. Anderson.
Suisun, Fairfield	2	1	0	0	0	0	0	Dr. S. D. Campbell.
Colusa	2	1	0	0	0	0	0	Dr. Luke Robinson.
Trinity County	...	..	..	.	.	..	.	Dr. J. C. Montague.
Santa Barbara	...	..	..	.	.	..	.	Dr. C. B. Bates.
Redwood City	1	1	0	0	0	0	0	Dr. Kirkpatrick.
San Andreas	...	..	..	.	.	..	.	Dr. C. B. Robertson.
Auburn	...	..	..	.	.	..	.	Dr. A. S. Dubois.
Tulare County	0	0	0	0	0	0	0	Dr. M. Baker.
Siskiyou County	4	1	1	0	0	0	1	Dr. Daniel Ream.
Susanville	0	0	0	0	0	0	0	Dr. J. J. Sawyer.
Downieville	2	0	1	0	0	0	0	Dr. Alemby Jump.
.....	...	..	..	.	.	..	.	.....
.....	...	..	..	.	.	..	.	.....

Remarks—In our report last month we noticed the appearance of several cases of smallpox at Knight's Landing. We are now happy to be able to state that only two deaths occurred in this locality, and that the disease has here entirely disappeared. Not so, however, in other portions of

the State. Notwithstanding the care and precautions which have been duly exercised, numerous cases have been reported to this office from various parts of the State as well as on the line of the Central Pacific Railroad. In the latter instance we are pleased to know that a system of quasi quarantine has been practiced by order of the Directors, especially with immigrant trains. If any case of smallpox is discovered, the car is switched off as soon as possible, and measures are immediately taken to disinfect it before it is allowed to progress on the journey. With such judicious action we can confidently predict that this contagious malady will be completely stamped out long before the advent of the rainy season. Until then we need have no apprehension of the disease becoming epidemic, for our experience with smallpox in California has established the important fact most satisfactorily that moisture is an essentially necessary element in its propagation.

THOS. M. LOGAN, M. D.,
Permanent Sec'y State Board of Health.

SLIPS OF THE TONGUE.—Wm. M. Ord, M B.. (Session of British Medical Association, August 6th, 1873.) Slips of the tongue were investigated with special reference to their sensorial origin. They might be due to fault of the brain, coming then clearly under the head of aphasia. Such faults might be actual disease, or weariness, or disorder of attention, such as absence of mind, excitement, intentness, or confusion. They might be, secondly, of sensorial origin, morbid conditions of the parts engaged in speech interfering with the guiding sensations upon which fluent speech depends, distracting the higher brain, and throwing thought and articulation out of step. Thirdly, they might be of motorial origin, where any circumstances hindered free movement of the lips, tongue or fauces.—*British Medical Journal*, September 6th, 1873.

ONE of the incessant wants of man is air.

Book Reviews.

A CONSPECTUS OF THE MEDICAL SCIENCES: Comprising Manuals of Anatomy, Physiology, Chemistry, Materia Medica, Practice of Medicine, Surgery and Obstetrics. For the Use of Students. By Henry Hartshorne, A. M., M. D., Professor of Hygiene in the University of Pennsylvania, etc., etc. Second Edition. Enlarged and thoroughly revised. With four hundred and seventy-seven illustrations. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

The work before us, like that of Neil and Smith, is a compend of the medical sciences, presented in as terse and yet comprehensive form as the limited space of one thousand pages will admit of. Whilst we acknowledge, as the author or compiler in his preface remarks, "that the thorough perusal of text books by the student during his attendance upon medical lectures is impracticable," yet we very seriously question if such works as the one under comment serve a good purpose. They are too brief and treat of no subject scientifically, and being brief, the student is too liable to depend upon this manual and others, than upon works which treat systematically and profoundly of the several subjects or sciences which as a learned physician he is expected to and should thoroughly understand. Prof. Hartshorne's "Conspectus" is, of the kind, a most excellent book; the typography is good and the illustrations are superior. We notice, however, that inaccuracies exist in several departments, the most conspicuous of which is in the allusion made to Simpson's operation of cranioclasm and the description of the Cranioclast. Yet, on the whole, it is as accurate as such books usually are, and is a very conveniently arranged handbook or vademecum.

THE SCIENCE OF HOMŒOPATHY; or, a Critical and Systematic Exposition of the Doctrines of the Homœopathic School. By Charles J. Hempel, M. D. Boericke & Tafel, San Francisco.

The author of the work before us is one of the oldest (if we are to judge from the steel plate portrait frontispiece) disciples of the doctrines of Hahnemann, and we are pleased to discover that he has been permitted to live long enough to correct many of the errors into which earlier in life he had fallen. We learn through this, his last effusion, that he deprecates and "condemns the so-called highest potencies which a few lovers of the fanciful and the marvelous have of late years sought to introduce into the homœopathic school as legitimate and reliable preparations."

There is, however, an inconsistency in the several chapters, and we can only excuse the same through our sympathy for superannuated intellect, incidental to age and natural imbecility, which so generally distinguishes not only the author, but all whose works on homœopathy we have had the privilege of perusing.

The book, however, is entitled to perusal, and should be read by every practitioner of medicine, that he may receive from an acknowledged authority the absurd dogmas of homœopathy, or, more correctly, of Hahnemann, its founder.

On Intra-Uterine Fibroids. By J. Marion Sims, M.D., Surgeon to the Woman's Hospital of the State of New York.

This monograph, the original of which was read by Dr. Sims before the New York State Medical Society at its last annual meeting, is full of interesting facts—the result of careful study of principles, and the practice or exercise of mechanical ingenuity.

The cases cited in illustration of the ideas advanced as to treatment of this class of cases are perfectly typical and the results marvelous. The enucleator and hook for traction suggested and used by Dr. Sims are ingenious and doubtless efficient.

We have never read with more interest a monograph such as the one before us, and we regret that our space precludes making a more extended notice, and, what we

would prefer, extended quotations or extracts from the paper.

We commend all who are interested in gynæcology to procure, if possible, a copy of Dr. Sims' contribution to the science and art.

CONTRIBUTIONS TO THE STUDY OF YELLOW FEVER. By J. M. Toner, M. D., and John M. Woodworth, M. D.

The pamphlet before us is a collection of all important facts relating to the history of this most terrible disease, and in its pages much invaluable information may be found.

The map accompanying the paper "indicates the region where yellow fever has prevailed, either in an epidemic or in a sporadic form, since the settlement of the country;" furnishing, as it does, valuable data of the past, will prove invaluable as a source of reference in the future. Dr. Toner, the late President of the American Medical Association, is peculiarly qualified, through opportunity and taste, to furnish a most acceptable and reliable history of this disease. Residing at Washington, he has every facility at hand through archives of the navy to collate reliable facts, and his innate taste and great ability as a writer has enabled him to present the results of his labors in a most concise and pleasing form.

No man in America has devoted so much of his time to the cause of science (certainly as to statistical facts relating to disease) as Dr. Toner, and we wish to add our testimony to the faithfulness of his labors and their grand results.

It is to be hoped that he will continue in the direction he has been engaged for some years past, and we wish that the Government would make a proper appropriation for the diffusion of the accumulating facts in its medical bureaus through and under the superintendence of Dr. Toner, who, as we have said, has a taste in that direction, and being independent of practice, can devote much time to the profit of science, and the profession of medicine.

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Original Communications.

TRAUMATIC FACIAL NEURALGIA.

Excision of a Portion of the Inferior Dental Nerve by Trephining the Lower Jaw; also Excision of a Part of the Infra-Arbital Nerve.--Complete Relief.

BY CHARLES B. BRIGHAM, M. D., HARV., SAN FRANCISCO.

C. P. C., æt, 55, m. Eight years ago the patient was struck in the face with a chair, it splitting the nose down to the right cheek. A month afterwards the wound was healed, leaving a cicatrice $1\frac{3}{4}$ inches in length. Two years later the patient felt a tingling in front of the ear and along the roots of the teeth of the upper jaw. There was a crawling pain and uneasiness, at times coming in flashes, as if many needles were pricking the cheek: it seemed to go from tooth to tooth. In the course of the five subsequent years, eleven sound teeth were extracted in hopes of relief. The pain then concentrated itself under the right ala of the nose, beneath the cicatricial tissue,

upon which, should any one press, ever so slightly, a pain would start up all over the right side of the face—at last the pain extended over the entire side of the face up to the forehead. Momentary or continued pressure on the supra-orbital nerve, or on the eyeball, aggravated it so much, that the tears would flow afterwards. As a general rule, whenever the patient swallowed either food or drink, the pain was agonizing ; if he passed his tongue over the lips it felt like a hot coal burning him ; if he pressed his lips together the pain, as he expressed it, was "tremendous." Even the act of speaking was attended with pain, coming on by fits and starts. At night the simple moving the head, so that the pillow pressed on the cheek, would wake the patient up five or six times. On account of the continuous pain, morphia had been given subcutaneously to the amount of six grains every 24 hours. The interruption of sleep, the difficulty experienced in taking food, and the almost constant pain, (there being about thirty spasms a minute) had reduced the patient to a very low condition. The various local and general means of treating neuralgia had been resorted to in this case without result. Finally, the patient resolved to try the chances of a surgical operation. It was decided to excise as large a portion as practicable of the infra arbital nerve, and also, as there was great pain in the lower jaw and lip, excision of a part of the inferior dental nerve was thought necessary. On the 25th of July, Dr. G. J. Vanvlack assisting, the patient being etherized, an incision, slightly concave towards the angle of the mouth, and measuring exactly two inches in length, was made on a line extending from a little below the caronoid process to the angle of the jaw. The fibres of the masseter muscle were exposed and separated in the line of the incision by means of a director. The periosteum was removed by means of a scraper as far as was necessary, in order to admit the crown of the trephine. Small retractors held the muscle and skin out of the way of the saw as it passed through the plate of bone—the disk being elevated and removed, the nerve was immediately

exposed, and by means of a small blunt tenaculum was separated from its neighboring vessels: it was then cut with a pair of scissors. It had nothing abnormal in its external appearance. The disk of bone removed bore the imprint of the dental canal, running along at the side of the hole made by the centre pin of the trephine—one small, cutaneous vessel was tied. Leaving a dry sponge in the wound, a triangular flap of skin was then dissected up from under the right eye, the base of the flap being the infra arbital ridge, while the apex pointed to the ala of the nose; three large branches ($\frac{3}{4}$ of an inch in length) of the infra arbital nerve were excised; eight small vessels were ligated, four silk sutures united the edges of the wound, leaving the ligatures to come out at the inferior angle. Three sutures were then placed in the lower wound, and two damp sponges were placed over each line of incision, and the whole side of the face was dressed with carbolized glycerine (1 to 10)—Lester's gauze and cotton wool—an injection of brandy was given per rectum during the operation; a subcutaneous injection of $\frac{1}{2}$ grain of morphia was given directly afterwards. The pulse before the operation was 120; in the evening afterwards was 80, T. 100; skin moist. The patient has had two naps in the afternoon; when he drinks, he fancies that the tumbler has a bit broken out of it; his wife has not seen him so comfortable for years. He himself says that he has had two slight flashes of pain. It is questionable whether this comes from the old trouble, or whether it is not a sensation similar to that which a person feels after a painful limb has been amputated; or again from the irritation of the proximal part of the nerve caused by the operation of excision. July 26th P. V. slept well all night; for many years he has not been able to drink more than a swallow at a time; now he drinks when he pleases, without pain; he feels more soreness on the left side of the jaw than on the operated side; has had a few twinges of pain in the upper lip; says he should not have noticed them if he had not had them before. P. 82 T. 102, July

27th, P. 72 T. 100. 'P. V. has had considerable pain to-day, at times, when the bandage became displaced. The wounds look very well, that of the lower jaw especially; the face is but little swollen; has beef tea and milk alternately every hour, also milk punch twice during the day. Evening, P. 64 T. 100, July 28th, P. 108 T. 100. P. V. has had but one pain, early in the morning; at noon he had a cold feeling which soon passed away, leaving the skin very hot; the wound under the eye is suppurating at its lower angle, but the other wound is dry and the flesh seems to double in toward the line of incision, as if it were solidly united. Evening P. 96 T. 102, July 29th, P. 84 T. 101; has had no pain whatever, to-day; takes his food regularly; drinks hot lemonade to help dissolve the mucus which collects in his mouth. Eve. P. 88 T. 102. Perspires freely after a nap. July 30th; there is an erysipelatous blush on the nose and right cheek near the upper wound; there is a slight swelling, but no pain; the sutures were removed from both wounds; they had caused no apparent irritation; the lower jaw wound is united by primary union, and the rounding of the sides of the incision is quite perceptible. July 31st, P. 76, T. 100. The erysipelas has extended to the forehead and right ear; had a severe night sweat, followed by a chilly feeling; takes acid sulph. die. gtts. v. morning and night. The patient has not dared to put his tongue out until now, and is surprised to find that he can do so without pain. August 1st, P. 65. T. 97. P. V. has had bottles to his sides and feet; has a tablespoonful of sherry every hour; beef tea and boiled milk as usual; he feels comfortable but very weak; the left cheek and forehead are quite red; when he drops off to sleep he wakes up confused and slightly delirious; the face and forehead are kept moistened with carbolized glycerine, and the wet bandages form a water poultise all around his head. August 2d, P. 76, T. 98. Face less swollen and red. P. V. feels better today; towards night he was taken with an uncontrollable

twitching of the fingers of both hands. P. 88 T. 103. August 3d, P. 65 T. 99. The redness is fading rapidly. P. V. has passed a good night, has no pains, and thinks that he feels better to-day than he has for many years. Eve. P. 65, T. 100. August 4th, P. 65, T. 100. All the ligatures were taken away to-day; no pain was felt on their removal; there is no discharge from the wound; the redness is quite gone. P. 65, T. 100. August 5th. P. V. sat on the lounge all day, and is feeling quite well; the nose becomes red at intervals, but is not swollen; appetite excellent; bowels regular since the operation; he thinks that he has eaten more since he was sick than during the past year. On the 10th of August the morphine was diminished to three grains daily, without inconvenience to the patient. On the 15th the patient walked out of doors. August 22d he continues to take exercises daily; has no pain whatever, no paralysis of the face; eats well of what he pleases, passes excellent nights, and is on the way to speedy recovery.

The operation of trephining the inferior maxilla for excision of the dental nerve, was first performed in July, 1847, by Dr. J. C. Warren, of Boston. He "removed a portion of the inferior dental nerve by trephining the body of the jaw in a lady fifty-nine years old, and thus afforded her relief from an excrutiating neuralgia of three years' standing." (Surgical observations with cases by J. M. Warren, M. D., p. 477.)

The operation is known as the Warren method; its object is to excise the inferior dental nerve just after it has entered the foramen, and thus to avoid injuring the gustatory nerve. It is important to excise as much of the nerve as possible, since we know that simple nerve section is usually followed by a reunion of the divided ends—this reunion taking place according to Paget, soon after division. It was observed by Dr. Waller that after the excision of a portion of a nerve, its distal part atrophies and degenerates,

the process taking much longer time in the human subject than in the lower animals.

Clay Earth as a Surgical Dressing.

BY FREDERICK WILLIAM GODON, A.B., M.D.,
Late Interne Rotunda Lying-in Hospital, Dublin, Ireland.

I beg leave to present the following cases as the result of the earth-treatment, not that I intend at present to enter into any discussion upon this mode of surgical dressing, as has already been fully and elaborately done by my friend, Dr. A. Hewston, of Philadelphia.* The following cases may be of interest to the profession in San Francisco, as this mode of treatment is not generally resorted to by surgeons here, and indeed, is comparatively untried in our western country:

†CASE 1. A. G., a widow woman, keeping a boarding-house in New York City, æt. 33, a native of the United States, had been suffering for nearly two years from a varicose ulcer of the lower third of the left leg. Her appearance, when I first saw her, was that of a healthy woman; but her history was imperfect, inasmuch as she did not choose to be frank and candid with me. She was the mother of three healthy children. She had been attended by several physicians during this time, and all kinds of treatment, constitutional as well as local, had failed to produce any favorable impression on the ulcer, which finally became so painful as to confine her to bed. The patient informed me, when I first saw her, that she had noticed no great increase in the extent of the ulcer for the past eight months, but that it had gradually grown deeper, and that each day it was becoming more offensive.

*"The Use of Earth as a Topical Application in Surgery," by Addinell Hewston, M. D., one of the attending surgeons to the Pennsylvania, Hospital 1872.
†Originally published in *The Medical Record*, Wm. Wood & Co., New York, 1873.

She had been in the habit of washing it carefully morning and night. When I first examined the leg, the ulcer was as large as the palm of the hand, with callous edges, and a grayish, shreddy surface. The veins of the leg were considerably enlarged. At this time she had been confined to her bed for five days, and was suffering great pain. I applied, at my first visit, iodoform in powder to the ulcer, strapped the part lightly, and bandaged the leg from the foot to the knee. This treatment was continued for five days, during which time the patient kept her bed, suffering great pain. The iodoform had the effect of cleaning off the sore nicely, but it showed no signs of healing at this time. The pain which the iodoform produced was most intense, destroying her rest, and causing her continually to complain of burning in the leg. On the sixth day I abandoned its use, and applied dry clay earth. This gave her entire relief, and she passed the following night comfortably. She felt much refreshed on the next morning, and told me that she had felt no pain whatever in her leg since the application of the earth. The dressing was then washed off with castile soap and warm water, the ulcer presenting a clean surface, and gave no pain whatever. I then applied earth moistened with water in the form of a paste, covered the part with waxed paper, and over this a firm and even strapping, and a roller bandage. The patient was orderéd to still keep her bed. No pain whatever succeeded this dressing. She rested well that night, ate a good breakfast in the morning, and expressed herself as feeling perfectly comfortable. The next day, the fourth on which the earth had been used, I again applied it in powder, covered with waxed paper, strapped firmly, and applied the roller. Still no pain in the part; the patient much encouraged and in excellent spirits. The next morning at my visit I found a bridge of tissue was forming across the centre: finely powdered earth applied, and the dressing continued as before. Sixth day: bridge across the centre complete, and the part cicatrizing rapidly. The treatment was continued. On the eighth day of the

use of the earth the patient begged to be allowed to leave her bed and occupy her lounge. I consented to this, and nothing unfavorable resulted from the indulgence; treatment continued. On the tenth day the ulcer was reduced to a small point, and under the daily application of the dry earth, dressing, strapping, washing and bandaging, on the thirteenth day the cicatrization was complete.

CASE 2. Mr. I., of Boston, Massachusetts, merchant, native of the United States, æt. 45, while in New York sent for me to visit him at his hotel (Hoffman House) and showed me a carbuncle, which had been about two weeks developing itself. He was suffering intense pain, and had been unable to obtain any sleep the previous night, indeed he told me he had been able to obtain but little sleep during its development. He had been applying poultices to it for more than a week. He did not claim to be a temperate man, but usually enjoyed good health. There was some pus coming out of two openings in the centre. The induration of the cellular tissue was considerable at its base. I made a crucial incision through the carbuncle down to the healthy tissue, without the use of an anæsthetic, and filled the wound with dry, finely-powdered earth. After the agony caused by the incision the relief this application gave was very great. The patient slept soundly that night, and was sitting up on the following morning when I visited him. The earth was then washed off. The slough was seen to be protruding, and the tissues were contracting vigorously. I reapplied the dry earth, and retained it by a covering of waxed paper and a few straps. On the evening of the third day after the incisions were made, they had greatly diminished in extent. Dry earth was reapplied and the wound dressed as before. On the fifth day I removed a portion of the core, as it was projecting, and dressed the wound as before. On the seventh day a clean excavated ulcer occupied the position of the carbuncle, and four days after, the surface had filled up to the level of the surrounding tissue. Cicatrization progressed rapidly under the same dressing, and four days

later the patient returned to Boston with nearly all the evidences of his former trouble removed, with the exception of a small granulating spot, which disappeared a few days after.

CASE 3. J. F., a tinsmith, æt. 47, came to my office, and showed me a varicose ulcer of the left leg of seven weeks' standing. The veins of the leg were considerably enlarged. The ulcer was much inflamed and very dirty. The patient was well nourished and healthy in appearance. He denied ever having had syphilis, but confessed that he had had a gonorrhœa some ten years before. He was not intemperate, nor would he acknowledge himself guilty of any great excess. He was the father of two healthy children, living and in good health at the time of writing. I applied a dressing of wet earth, strapped the ulcer firmly and evenly, and a roller bandage from the toes to the knee, told him to go home and keep his bed. On measurement, etc., following morning, I found the ulcer to be $1\frac{1}{4} \times \frac{1}{2}$ inches. It was washed with castile soap and warm water, and dry earth, finely powdered, applied, strapped and bandaged as before. The ulcer had been causing the patient so much pain previously that he willingly consented to give up his work and remain in bed. The pain entirely ceased after the application of the earth, and on the following day I found him sitting up and able, he said, to go to his work. The comfort he was enjoying at the time, and the encouragement I was able to give him in regard to a complete and rapid cure under the treatment, if he would follow my directions implicitly, made him consent readily to remain quiet. He remained in the horizontal posture for the following four days, and suffered no pain in the leg. At the expiration of another week, under the application of the same treatment, the cicatrization of the ulcer was complete.

CASE 4. Mrs. J., æt. 25, married, residing in Brooklyn, New York, consulted me for an epithelial ulcer of the upper lip of the size of our present one cent coin. It had appeared some six weeks before she presented herself, and

she told me that it was daily increasing in size. Any motion of the lip caused great pain, so that talking and eating were agony. The lip was considerably swollen. The ulcer originated from what the patient termed a cold sore, and she had used the oxide of zinc ointment, camphor water, and many other remedies at the suggestion of solicitous friends. The ulcer, the patient told me, was steadily increasing in size, and was so unsightly that she had been wearing court-plaster to hide it. She complained of sharp pains in it, which she likened to the pricking of needles. As the ulcer was increasing downward, and had already involved the margin of the lip, she became very anxious lest it might "spread," as she called it, to the lower lip. The discharge was slight, of quite an offensive odor. There was also slight indication of the edges and the base was of a grayish brown color. I first applied powdered iodoform, but it produced such intense agony, contrary to my expectations, that she absolutely refused to allow me to continue its use. The iodoform also increased the swelling of the lip, and she told me that she would not submit to any further disfigurement. I then applied a paste of clay earth with a camel's hair brush; on this I placed a piece of charpie cut to the size and form of the ulcer, which was held in place when the earth dried, and made by no means an unpleasant appearance. So soon as the earth was applied all pain seemed to cease and the patient was greatly pleased. The ulcer was dressed twice daily, morning and night, in this way, and on the tenth day of January, 1874, fourteen days after the first application of the earth, the ulcer was entirely healed. The patient gave no history of cancer or phthisis in her family, and the lady has always enjoyed excellent health, and is of an unusually robust and healthy appearance. My friend and colleague, Dr. Chas. E. Lockwood, of New York, saw this case with me, and with me watched its progress and result.

I was sent for on the evening of the 8th of February, 1874, by Mr. M., to see his son, a youth of seventeen years

of age, who had been bitten by a dog some three hours before. The brute had bitten through a thick boot, and lacerated the great toe considerably. After a thorough washing of the part with castile soap and warm water, I applied the dry clay earth to the wound where I allowed it to remain until the morning of the 10th. The wound on its removal, then was cicatrizing rapidly and looking well. The earth was again applied as before, and allowed to remain until the 13th inst., when it was removed, and the wound was found to be entirely cicatrized, and on the following morning the patient returned to his work.

On the 13th of September, 1873, I operated on M. W., a colored woman, æt 43 years, for fistula in ano, with which she had been suffering seven months. The origin of the trouble the patient attributed to a bruise, the result of a fall. The inner opening was just within the sphincter, the outer one a little more than an inch from the ruga. I laid the track open, and after the bleeding had ceased, dressed the wound over with dry earth powder. This was continued until the 20th inst., after that on every alternate day, and the wound was perfectly cicatrized on the 9th day of October.

I have now used the earth as a surgical dressing in a large number of cases, in all of wnich it has acted most satisfactorily to myself and patients. In cases of burns and scalds, I cannot speak too highly of it as a dressing, as it most effectually and completely allays the pain, promotes cicatrization, controls inflammation, and most efficiently prevents putrefaction. In cases where I have used the fuming nitric acid for burning chancroids about the genitals, a paste of earth applied to the parts, promptly allayed all pain, and not a single one of my patients ever complained of soreness of the parts. In cases where there was great secretion and a foul odor, the earth acted most promptly and effectually as a deodorizer. Dr. Thos. H. Andrews, assistant demonstrator of Anatomy, at the Jefferson Medical College, Philadelphia, gave the deodorizing power of the earth a severe trial in the dissecting rooms of that

institution and concluded it *"a complete success," proving itself to be "decidedly preferable to the many articles vaunted for that purpose." I have thoroughly tested its efficiency in this respect myself, and a single washing of my hands in about half a gallon of water and less than a pound of earth poured into it, after making an autopsy or dissecting, found the cadaver has sufficed to entirely deodorize and clean them, with the assistance only of a nail or hand brush, but without soap of any kind whatever. The earth I would strongly recommend, is made from the clay used in the Philadelphia brick yards for the purpose of brick making, and is of a reddish brown color, and has been prepared for me by O. E. Hubell, of Philadelphia. The article that Wyeth advertises and sells is not the earth I would recommend.

Remarks on Intemperance—Its Treatment and Prevention.

BY A. P. HAYNE, M.D.

Having, on a previous occasion, pointed out the toxicological effects of alcohol on the human system, and endeavored to show the pathological changes and conditions which characterize each of the three stages of the disease, the subject would not be complete without considering it in its *moral* aspect, and, at the same time, suggesting such rules of practical treatment and prevention as experience and observation have dictated.

There can be no question that of all subjects which underlie the happiness and well-being of society, the stability and purity of government, and the welfare and prosperity of mankind, *intemperance* occupies a more important position than any one topic which can engage the attention of the legislator, philanthropist, or physician.

*From a private letter.

Not only individual, but national character is involved in the issue; and as the question now presents itself, that issue is to be met, and a solution attempted, ere the present generation has passed from the stage of existence. Especially to us, as citizens of a new and great republic, does the magnitude of this national evil and the momentous consequences of the result commend itself.

That the problem is a difficult one, and one that partakes of a two-fold significance and importance, involving, as it does, the moral and social, as well as the personal and political interests of society, are facts which render its solution the more imperative and urgent.

The question, considered in its practical bearing, seems to us to resolve itself into two propositions, viz.: Can the evil be alleviated? and, if so, how is that to be accomplished?

Before proceeding farther, it may be well to define what we understand by intemperance. Considered in a medical point of view, it is a disease in which the appetite for alcoholic stimulants is stronger than the control of the will, and, like any other form of monomania, renders the individual incapable of resisting the desire for its gratification.

That this diseased condition, when once developed, is kept up and liable to recurrence by a continued or periodical indulgence in the use of a poisonous agent; and that its symptoms and manifestations are as well marked and truly defined as in any other morbid condition of the system, cannot, we think, be denied.

Whether it be due, primarily, to hereditary transmission, or is developed, by slow degrees, in the digestive and assimilative organs, or the brain and ganglionic system, are questions which we shall not stop here to discuss. Suffice it to say, that the disease (hereditary or acquired) exists, and that it is with its prevention and eradication (if possible) that we are most interested.

It is not our design, on the present occasion, to discuss the various legal remedies, which have at different times been proposed for its suppression. Whether these remedies

have been beneficial, or otherwise, we leave others to determine. Our own conviction is, that, at best, they can only prove as auxiliaries to other and more efficient means.

Our design, at present, is to consider the subject from a medical stand-point, and from a somewhat extended field of observation, to suggest what we consider the best means for meeting the requirements of the case.

Having expressed our belief that intemperance is a *diseased* condition, we would next remark that this condition differs only in *degree*, from the highest to the lowest, or simplest form, in which it comes under our observation.

We draw no distinction between the *habitual* and the *periodical* inebriate, except as regards the length of time and the difficulty of cure. In the one, the disease may be said to exist in a *chronic*, while, in the other, it presents itself in an *acute* form. In both alike, the same effects follow the same cause, modified only in intensity, duration, and frequency.

With respect to the treatment of both of these forms of the disease, we think the same general rules may be adopted, which we shall proceed to notice under three separate heads, viz.: the medical, the moral, and the prophylactic.

Before an intemperate man can be expected to exercise a proper control over himself or his actions, he must first be placed in such a condition of physical health that the bodily functions and mental actions shall have, in a degree at least, resumed their normal condition. During this stage of treatment, except in some few rare instances, *restraint* is a necessary part of the means to be employed.

Being strictly medical in its character, it includes that long list of remedial agents, which are familiar to every medical man—such as tonics, nervines, deobstruents, alteratives, opiates, and stimulants.

We may here remark, in refutation of a common and popular error, that there is, strictly speaking, no such thing as an *antidote* for intemperance. There is no agent,

or combination of agents, known in medicine, which act like quinine in intermittent fever, colchicum in gout, or arsenic in skin diseases.

Our efforts should be to correct a perverted function and restore a diseased organ—to build up, as it were, a shattered constitution, and renovate and strengthen the tottering framework of the body.

Under this head, also, are included all those hygienic and dietetic rules which should govern our practice in the treatment of those states of the system which follow convalescence from chronic affections generally.

Thus, exercise, change of air and scene, sea bathing, the shower bath, occupation and cheerful company are fully as important as iron, bark, quinine, opium or chloral hydrate. We have but little doubt that a thorough system of training, such as pedestrians and gymnasts undergo, would be found to be one of the very best auxiliaries which could be used to fully carry out our idea of the medico-physical treatment of intemperance.

Having, then, first placed a man in a condition physically capable of controlling his actions, the next and most important step is to restore his *moral* nature. In this term we include not only a perception of right and wrong, but a realization of the duties of life. This should always accompany, and as far as possible be associated with, the treatment we have just pointed out. The mind and body are, in fact, so intimately associated and dependent upon one another that to separate them would be contrary to the laws of nature.

That the moral nature partakes of the bodily infirmity, and is, *per se*, in a diseased and unhealthy condition, can not, we think, be a question for debate. If, as the immortal bard tells us,

> "It is *in ourselves* that we are
> Thus or thus,"

Surely it is a matter of the most vital importance that our inner self should be guarded and watched with no less care than the physical frame-work which contains it and is, in turn, influenced by it.

By a restoration of our *moral* nature, then, we would wish to be understood as inculcating all that can elevate and refine the moral sensibilities, awaken a perception of our accountability, and inspire a resolution to fulfill the object for which man was created.

We believe that no man, however degraded his condition, is entirely destitute of this *moral* nature. It may be blunted by a long career of self-injustice; it may be dormant through physical or other causes; it may have entirely ceased to exert any perceptible influence upon his life, character, or actions; but, if properly appealed to, it will eventually, in the vast majority of instances, respond to the voice of reason, of hope, of encouragement, of religion. On it, we rest our strongest trust; in it, we place our firmest reliance; and through it we may hope to restore the countless number of those who have "fallen never to hope again."

But how, it may be asked, are we to avail ourselves of this most potent auxiliary?

We answer *first*, by an appeal to the *manhood* of human nature; and *secondly*, by the force of *example*. To accomplish both of these, we think that kindness and encouragement are the chief and most effectual means to be employed.

No man was ever deterred from evil, or reformed from a bad habit, by harshness or severity. In this respect, we think, much of our prison discipline at the present day is open to improvement. The more a man is degraded in his own eyes, or in the estimation of others, the more are his moral sensibilities blunted, and his manhood destroyed. Especially is this the case in the unfortunate victim of the disease of which we are now speaking. In fact, in the majority of instances, we have found a preternatural acuteness of sensibility to be the first dawn of an awakened conscience—the earliest indication of a restoration of that physical and moral capacity for self-control of which we have already spoken.

Words of encouragement and hope spoken at this time

are worth more than volumes of admonition, or sermons of threats and denunciation; for

> "There needeth not the hell that bigots frame
> To punish those who err; *man* in himself
> Contains at once the *evil* and the *cure;*
> And all-sufficing nature can chastise
> Those who transgress her law:—she only knows
> How justly to proportion to the fault
> The punishment it merits."

In fact, we are glad to acknowledge that much of that so-called religious intolerance of former times has given place to a larger philanthropy, and man, at present, is regarded not as a criminal and an outcast, to be terrified into submission, but as a rational human being, endowed with all those attributes which elevate the soul above the brute creation, and place its possessor on an equality with his fellow beings.

By the means which we have thus hurriedly and imperfectly endeavored to point out, we believe that the moral nature of man may be not only recalled into consciousness, but taught to exercise a governing influence upon the life and character, until the design of the Creator, when He formed him in His own image, and, pausing in His great work, "saw that it was good," shall be fully realized.

We have left ourselves but little space for what we have to say upon the last of those measures which we included in our general plan of the treatment of intemperance, viz.: the prophylactic.

It has been, and is at the present day, often said that it is more difficult to keep an intemperate man reformed than to reform him. While we cannot deny that there is much truth in the assertion, yet we do, at the same time, unhesitatingly object to this manner of argument, as applied to this or any other disease to which our frail nature is liable. As well might such an objection be urged against the *cure* of any physical or mental ailment, because all diseases are not like small-pox, or whooping-cough, or scarlet fever.

That many relapse is just as true, and no more so, as that many are liable to a periodical recurrence of intermittent fever, dyspepsia, rheumatism, or nervous headaches.

Besides, in these cases it is not that Nature, when once restored to the normal exercise of her functions, will of *her own accord* relapse into a diseased condition ; but that the want of a *resolute will* will sometimes give way to the recurrence of those habits which originally produced the disease in question. Herein the reformed inebriate has, in our opinion, an advantage over the unfortunate victim of a malarious, or rheumatic, or scrofulous diathesis, inasmuch as he holds in his *own hands* the means of his safety and his security. No man can be forced to swallow what he knows to be a poison, unless his will consent; and on this one *fact* we base the entire system of what we call *prophylactic* treatment.

The knowledge of this *power* is the inebriate's *strength*. No one can take it from him ; no power can rob him of its inestimable possession. Once, therefore, that he has the moral courage to abandon the use of what he knows to be fatal to his mastery over self, from that moment he entrenches himself in a fortress, which is perfectly *impregnable*, unless he chooses to betray it. Having once placed the inebriate in this position, we have done *all*—no, not all, but nearly all that medical means can do for him.

Here he will find a great assistance from occupation and employment. An idle mind is a "fertile field for noxious weeds to flourish in," and an idle body has been called the "devil's own work-shop."

We would therefore urge upon every one so situated to seek employment—if not for pleasure or profit, for employment's own sake. The number of those who are "a law unto themselves" are few and widely scattered, and he may not be of that favored class.

To all we would say "be hopeful!" be "steadfast in faith!" Seek some end or aim in life, and let that end be your *goal*, whether it be ambition, or fame, or glory, or worldly possession, or domestic peace, or religion, or anything which will elevate.

To any one who has thus regained the mastery of himself there is but little more needed, except that eternal

vigilance which is not only the "price of liberty," but the price of existence itself.

We have reserved for our closing sentence the last and most sad question which can be addressed to mortal ears: "Are there any who are beyond a hope of reformation?" and while we are reluctantly compelled to answer in the affirmative, still we must at the same time add that as long as "there is hope while there is life," so we should never desert a fallen brother, or abandon him as *incurable*, until a power stronger than our feeble arm shall see fit to drop the curtain of oblivion upon his faults and frailties, and summon him to that presence before which we must all one day appear.

The number of this class, we hope, is small, very small, as compared with those who are able to "work out their own redemption." Let us hope that the time is not far distant when it will become smaller and smaller, until, finally, *none* are embraced within the shadow of its dark and dismal portals.

To those who have been more fortunate, those who have "untwisted to its final link the accursed chain which fettered them," we would say that the world in which we live, and the necessities of civilization, have imposed an individual responsibility upon us all, which we can neither escape nor avoid. Let each, then, strive to emulate the other, and leave behind him footprints on the sands of time;

> "Footprints that perhaps another
> Sailing o'er life's solemn main,
> A forlorn and shipwrecked brother,
> Seeing, shall take hope again."

M. COLLADON, the Geneva physicist, has published an essay on the subject of turning poplars into lightning conductors. He proposes to insert in the lower part of the trunk a metallic rod, which he connects with the earth by a chain, so that the fluid cannot leave the tree to dart at any object within a short distance, which at present is very often the case.

Surgery.

On Enlargement of the Prostate.

Dr. J. S. Hough says, on this topic, in the *Medical Times*, February 14th, 1874:

It is not difficult to understand that the prostate body, which remains undeveloped in the male so long as the organism is under the domination of the reproductive organs (testicles), should begin to develop when this influence is removed. So in the woman, when the reproductive faculty is extinguished at the menopause, or by ablation or disease of the ovaries, the uterus, which is the analogue or a part of the prostate in the male, degenerates, shrivels up and is reduced in size. The uterus in the female diminishes in size from the same cause that the prostate increases in size in the male, viz., the deprivation of the domination of the sexual organs (testicles or ovaries). It would be interesting in cases of enlarged prostate to inquire whether there is loss of, or diminished, sexual power or vigor, as confirmatory of this theory.

It is no argument against this theory that enlargement does *not always* occur in old age, as one might imagine from the statements of the authorities cited; for all males or females, even when deprived of the essential organs of reproduction, do not develop secondary sexual characters of the opposite sex, though it is the rule for them to do so.

It is a rule, therefore, that enlargement of the prostate occurs in the aged (being indicative of decline in, or extinction of, the procreative faculty) for the same reason and under the same circumstances that atrophy of the uterus takes place in the aged woman; both indicating a developmental determination towards an intermediate (hermaphroditic) sexual condition, caused by the elimination of the domination of the essential organs of generation (testicles and ovaries).

This theory is strongly corroborated by the fact of the very great frequency of cancer of the uterus (of all the women dying of cancer, 28.66 per cent. die of cancer of the uterus), and the very great rarity of cancer of the prostate body (of all the men dying of cancer, only .27 per cent. die of cancer of the prostate).

Now, it is well known that cancer is a degenerative process or retrogressive developmental disease, and attacks

the mammæ, or glandular organs, and the uterus, a muscular organ, usually after they have ceased to perform their destined functions connected with reproduction. This being true, it is curious to note that the prostate is more or less enlarged in from 20 to 35 per cent. of all the men dying after the fiftieth or sixtieth year; yet of all the men who die of cancer, only .27 per cent. die of cancer of the prostate, it being more than one hundred times less frequent than cancer of the uterus. The conclusion is, therefore, that, cancer being a disease which attacks organs that are degenerating, and itself further degenerating and destroying them, the enlargement of the prostate body is not a retrogressive but a progressive developmental evolution of the congenitally under-developed homologue of the uterus. The fact being established of the development of female organs and secondary sexual characters in old men, that is, a tendency towards hermaphroditism (which latter is an intermediate state between the separate male and female condition), is altogether in favor of an opinion which we have deduced from numerous observations, viz., that the type of all diæcious species is sexually hermaphroditic; that is, the man is as much above the type, as the woman is below it.

We conclude, therefore, that simple enlargement of the prostate body, far from being a diseased condition, is frequently, and indeed generally, but one of the exhibitions of the vibrations in the pendulum of developmental or evolutionary forces which determine and separate the sexes.—*Medical and Surgical Reporter.*

Intravenous Injection of Chloral in Surgical Operations.

M. Bouillaud read before the Academie des Sciences (*Gaz. Med. de Paris*, May 16, 1874) an account of the following operation recently performed by M. Ore, in which chloral injected into the veins was the anæsthetic used. The patient, who was about to suffer resection of the calcaneum, had a solution of chloral (of the strength of one part to three of water) injected slowly into the radial vein of the right arm.

By the time three drachms had been introduced, the patient declared that he felt very sleepy. The injection was

pushed until five and a half drachms of solution (about 115 grains chloral) had been introduced, when the patient suddenly fell into a profound slumber, accompanied by almost cadaveric rigidity.

The time required to produce this effect was about ten minutes. The operation, involving the usual incisions, required about twenty-five minutes for its performance.

During the whole of this time the patient slept calmly, made no cry nor complaint, while the perfect immobility of the limb denoted complete annihilation of sensibility. Respiration continued calm and regular, and showed none of those spasms of asphyxia which were observed when similar injections had been used in tetanic cases.

When the operation was finished, the interrupted current from a strong battery was used to restore the patient to consciousness, one pole being placed on the side of the neck and the other over the epigastrium. Under the electric influence the respiration became freer, and in a few moments the patient sat up and conversed, though wildly, as if intoxicated. This condition lasted an hour, followed by floods of tears. Shortly after, he sank into a natural sleep, and waked later in the day in his usual condition.

M. Ore's conclusions are as follows: 1, a solution of one of chloral to three of water is sufficiently strong for the purpose of intravenous injection; 2, the injection should be made after direct puncture, without laying bare the vein, in order to avoid all risk of coagulation or phlebitis; 3, the injection should be made slowly, so as to test the idiosyncrasy of the patient; when sleep is produced it is unnecessary to continue the injection, for the anæsthesia will persist in a manner never brought about by chloroform; 4, the operation terminated, it is possible, by means of electric currents, to cause the condition of immobility to cease on the instant. The surgeon should have at hand from the beginning an electrical apparatus in good working order. If the anæsthesia produced by intravenous injections of chloral be applicable to surgical operations, it will be found exceptionally advantageous in operations of long duration, such as resections and ovariotomy.—*Philadelphia Medical Times.*

SIN is never at a stay; if we do not retreat from it, we shall advance in it, and the further on we go, the more we have to come back.

Shortening of the Leg in Oblique Fractures of the Femur.

The following letter from Prof. Hamilton to Prof. Connor, of Detroit, explains itself, and is of such universal interest, that we publish it in full:

SYRACUSE, N. Y., July 9th, 1874.

MY DEAR DOCTOR:—While spending a few days with my friends in this place, Dr. Didama handed me a copy of your journal for July, in which I find a report of the proceedings of the American Medical Association, lately convened at Detroit, which contains the following statement:

"Dr. Sayre said he knew his measurements were correct; that Dr. Frank Hamilton had made the measurements, and that he was a man so violently opposed to the theory that in his published writings he had denied the possibility of any oblique fracture being cured without shortening. For this reason he (Dr. Sayre) had asked him to measure the patients. He said if seven successive cases would be presented, he would agree to give up his opposition to the theory. He found the cases and surrendered."

It will be understood that reference is here made to fractures of the femur.

Permit me to reply. *First.* I am not quoted correctly as to what I have said of shortening in the case of oblique fractures of the thigh. A reference to my published writings will show that Dr. Sayre has fallen into a slight error upon this point. *Second.* I have never seen "seven successive cases" of perfect femurs after fracture. I do not think I have seen two, certainly not three.

The August number of the *New York Journal of Medicine* will contain a full statement of my experience in reference to cases which have lately come under my observation.

For the purpose of encouraging efforts in this direction, and for the advancement of surgical science, I offer a prize of one hundred dollars for seven examples of fractures of the shaft of the femur (I will not say "successive,") occurring in persons over twenty years of age, who were not at the time of the injury suffering from paralysis or atrophy of the limbs, which have been treated by the surgeon presenting the cases, and which have united without shortening. The diagnosis of the fracture to be verified by at least one other surgeon who was present at or near the time of the accident, and who assisted in making the diagnosis. The final measurement to be made by myself,

and two other surgeons; the latter to be chosen by the person presenting the case and myself. The opinions of the majority shall decide the case.

I would be thankful if other journals would repeat this offer in my name.

With sentiments of my esteem, I remain,

Yours truly,

FRANK H. HAMILTON.

TO LEARTUS CONNOR, M. D.

Popliteal Aneurism Cured by Forcible Flexion.

Mr. Benfield reports the case of a man æt. 38, of good general health, who was troubled with a small pulsating tumor in the left popliteal space. A distinct bruit was heard on applying the stethoscope, and firm pressure on the artery above the tumor arrested at once both the bruit and the pulsation. Treatment by flexion was resolved upon.

A flannel roller was applied to the leg, which was now flexed upon the thigh, and the latter upon the abdomen. The leg and thigh were firmly bandaged together so as to maintain forcible flexion, and heavy sand-bags were also employed to keep the patient from rolling out of position. This procedure occasioned very great pain, and a quarter of a grain of morphia was given subcutaneously for its relief. About six hours from commencement of flexion the patient could bear the pain no longer, and the bandage was removed and the leg gently straightened. No pulsation or bruit was now discernible. Patient complained of being chilly, and the foot of the affected limb was decidedly colder than its fellow. The limb was encased in cotton-wool, a pad of lint placed in the popliteal space, and a flannel bandage applied. It was then placed straight on a pillow.

The aneurism was now practically cured, but for the sake of safety the pad and bandage, together with rest in bed, were maintained for ten days. The man was then allowed to get up and take exercise, which occasioned no pain or inconvenience. He was thus kept under observatien for about three weeks, when he was discharged cured.—*The Lancet*, May 30th, 1874.—*Philadelphia Medical Times.*

THE essence of true nobility is respect of self.

Institutes and Practice of Medicine.

Diagnosis of Hystero-Epilepsy from True Epilepsy.

M. Charcot, in a recent clinical lecture at the Salpetriere, called attention to the traits which distinguish hystero-epilepsy from true epilepsy. In hystero-epilepsy, M. Charcot says, the attack is always announced previously by premonitory symptoms of rather long duration. In every kind of hysteria that can be called ovarian, these premonitory symptoms consist in an aura starting from the ovarian region, and reaching successively the epigastrium, the neck, and finally the head. These premonitory phenomena, so curious, and of an incontestable diagnostic value, are wanting in epilepsy; in epilepsy, the premonitory symptoms are sensations in altogether a different part, which ordinarily precede the attack only by a few seconds.

The cry of the hystero-epileptic at the moment of the fall is generally prolonged and modulated; it can hardly be confounded with the short cry of the epileptic. When the patient has fallen, the symptoms in the two affections are much alike; the head and eyes are turned in the same way, the limbs are taken with tonic convulsions; the whole body becomes rigid, the face congested, and a bloody froth flows from the mouth. But the differences soon reappear; at the moment when the epileptic is seized with a snoring which recalls the apoplectic stertor, the hystero-epileptic seems on the contrary to wake up, sometimes to return to the former condition, sometimes to offer a succession of symptoms making, in some way, a new period, which might be called the period of contortions. These contortions, sometimes very extraordinary and alarming, are very variable, and it can be said that in every patient, in spite of some traits in common, they are different. During this time, the hystero-epileptic seems to be affected by delirium, sometimes noisy, and which seems in a great part to give the contortions and attitudes and gestures an intentional character. To the contortions succeed, in the hystero-epileptics, delirium relatively quiet, one of the characteristics of which are hallucinations of the sight and hearing. They hear bells and voices, etc., they see every kind of animal, butterflies fluttering along the ceiling, lizards climbing the walls, vultures coming to peck their faces; they try by gestures to escape from these imaginary beings;

at other times they imagine themselves walking over serpents, and they give jumps to avoid them, etc.

This delirium, which at this point resembles in a certain degree delirium tremens, is quite different from epileptic delirium, which consists mostly in a maniacal excitement, accompanied sometimes with extreme violence, and of a gloomy character, which renders the patients very dangerous.

If it be a woman who is threatened by an attack, the nature of which is doubtful, compression of the ovary will contribute to clear up the diagnosis; if there be no effect, then one has to do with an epileptic; in the hystero-epileptic, though the ovary may be but slightly affected, it will produce, if not always a complete arrest of the attack, at least a modification more or less marked in the symptoms.

Sometimes, and this also in hystero-epilepsy as well as in epilepsy, the attacks are connected in a series, and produce in the one case a state of hystero-epileptic disease, in the other a state of epileptic disease. In these cases thermometry gives important assistance; in the epileptic in a state of disease the temperature rapidly attains a great height, 40°, 41°, and even 42° (Cent.), and death often closes the morbid scene; in the hystero-epileptic, in spite of the almost incessant repetition of the attacks of an extreme intensity, the thermometer marks 37.50°, 38°, and a few tenths. After 50, 100, and 200 attacks of hystero-epilepsy, the temperature is definitely the same as it was at the end of the first attack.

Besides the convulsive accidents there are, adds M. Charcot, other characteristics which facilitate the diagnosis. Epileptics are irascible, subject to impulses which make them dangerous; hystero-epileptics are capricious, fantastic, but are on the whole hardly dangerous. Vertigo, which is so frequent in epilepsy in the interval of the attacks, has not its representative in hystero-epilepsy.

The mental condition, which has already been treated by many authors, is seen in the end to be not different in the two diseases. The hystero-epileptics preserve those intellectual faculties which they had originally. One of the patients shown was in this respect the same as she was thirty years ago in spite of the persistence of the disease. The epileptic, on the contrary, if the disease be intense, loses his intelligence every day, and at the end of a time more or less short, he falls into a kind of stupor, which generally ends in true dementia. These principal distinctive marks, said M. Charcot, useful already to establish a

nosographic demarcation, will suffice, in general, to separate clinically two affections of which the prognosis markedly differs.—*London Medical Record*, March 18th, 1874.

Epidemic Goitre.

In some recent numbers of the *Gazette Medicale* (Jan. 10 and Feb. 7), Dr. Michaud gives an account of one of those curious epidemics of goitre which every now and then break out in the French Army. This one occurred during the months of April to September, 1873, in the 75th Regiment of the line, stationed at the garrison of St. Etienne. Of the mean effective of which the garrison during this period consisted, there were about 280 soldiers who became the subjects of goitre. Dr. Michaud, however, is not able to give an account of all these cases, but only of fifty of them who were sent to the Hotel-Dieu of St. Etienne, of which he is surgeon.

Sometimes the affection came on with gradual tumefaction of the neck without other symptoms, but in other cases it was attended by pain, dysphagia, congestion of the face, difficult respiration, and inability to march. The tumefaction was at first diffuse, soft, and indolent, but soon the tumor became large, indurated, and well defined, the lateral lobes of the thyroid projecting more or less under the skin. The right lobe was especially affected in about half the the cases. In considering the causes of the disease, epidemic goitre must be distinguished from endemic, in which these are very obscure, while in the epidemic form they can generally be made out. In the present instance forced marches in a mountainous country and an insufficient dietary seem to have been the prominent causes. The forced marching combined with ascension, produced great congestion of the thyroid, which by frequent repitition passed into hypertrophy of the gland. Dr. Michaud does not attribute much influence to the local action of cold on the glands, in the way of currents of air, etc., believing that, were this operating, bronchitis, laryngitis, etc., would oftener accompany the goitre, as has been the case in some epidemics, in which also the thyroid itself has been more

acutely painful than in the present instance. The insufficient diet allowed to the men during their arduous marches has also acted as an adjuvant, although its precise mode of action is not determinable. Its reality, however, is shown by the fact that the officers and sub-officers who underwent the same fatigues as their men were able to resist their ill-effects, owing to better regimen; and by the excellent effects which a tonic treatment and a nutritious diet exerted in securing a prompt cure of the disease. The iodine treatment completely failed, and many cases which had long been subjected to it in the garrison hospital without avail, soon recovered in the Hotel-Dieu under quinia and iron, with a substantial diet of roast meat and wine. When these means were employed in the early stages of the affection, they rapidly succeeded. The anæmic and emaciated condition of several of the patients, indeed, srongly indicated this procedure.—*Medical Times and Gazette*, February 21st, 1874.

Hysteria in a Male.

The following case is reported by Dr. Gordon, in the Dublin *Medical Journal*: He was asked to see a policeman, who was brought at twelve o'clock the night before into the hospital, suffering from intense pain in his stomach. This pain was so severe, so agonizing, that he walked about the ward the entire night, screaming with pain, and preventing the other patients in the ward from getting any sleep. No treatment seemed to have the least effect in subduing the pain. When Dr. Gordon saw him on the following morning, the first thing that struck him as remarkable was the extreme quietness of the man's pulse under such a history of agonizing pain; it was only 76; but he was restless, incessantly tossing about; would scarcely allow of any examination of the abdomen, which was rather swollen and tympanitic; bowels confined; urine copious and light colored; could only swallow liquids, and everything he had taken during the entire night he had vomited, even a little water; as fast as it was swallowed it came up again; and, indeed, latterly it was quite evident that emesis took place even before the fluid reached the stomach. The diagnosis arrived at was that it was a

case of hysterical vomiting, and that the pain was also of the same character; it was never referred twice to exactly the same situation—now to the epigastrium, now to the right, and again to the left side. The vomiting was also peculiar; indeed, there was no actual vomiting, but a rejection of food before it could have reached the stomach. Large doses of morphia by subcutaneous injection were directed, the result being that the man slept, got into a mild perspiration, was much relieved, and took food in small quantities. The same symptoms recurred from time to time, the intense agonizing pain, and the vomiting. That morning, when Dr. Gordon went to the hospital, he was told the man was spitting up blood. He found some blood in the spitting-cup, but on examination he was satisfied it was blood that came from his mouth or throat, and not from his lungs or stomach; that it was, in fact, induced by his own voluntary act. This, of course, confirmed the diagnosis, that it was purely a nervous affection. One thing, however, struck him as very remarkable, the rapid emaciation which the man had undergone within four days. He had endeavored to examine very carefully into his history, but he could not find out anything which he could directly assign as the cause of the affection, except that he was a man not long in the force, had come up from the country, and had been on rather severe duty. The case bore out the extreme difficulty of diagnosis in these cases, particularly when they had to deal with a male subject.

Treatment of Granular Pharyngitis.—An extract from the *Bull. de Therap.* in *L'Union Med. du Canada*, March, 1874, gives Dr. Cousin's method of treating this affection. Dr. C. states that general remedies suited to the diathesis should be employed as well as local applications. He prefers gargles to inhalations, excepting where there are laryngeal complications.

Tar-water, or water impregnated with sulphurous acid, may be employed, though Dr. C. prefers a solution of some simple saline, common salt for instance, with perhaps the addition of glycerin. Solutions of alum, he thinks, destroy the enamel of the teeth. If the inflammation has reached the naso-pharyngeal cavity, it will become necessary to use the nasal douche. The pharynx may be touched with small

pledgets of cotton or lint, dipped in Mandl's solution of iodo-iodureted glycerin (one per cent.), or of pure glycerin.

In scrofulous ulceration of the throat, especially in phthisical patients, a solution of equal parts of chromic acid and water may be applied by the same method. The patient should gargle with some neutral fluid or water immediately afterwards, and the application should be made twice weekly.

EXTRAORDINARY ACTION OF NITRITE OF AMYL.—Dr. E. B. Janeway reports a case of cerebral anæmia with failure of the heart's action from pericarditis where the patient was entirely unconscious, pupils dilated, conjunctiva insensible to touch, no pulse at wrist, breathing spasmodic. Inhalations of five drops of nitrite of amyl were commenced and cautiously increased. After the use of twenty drops the pupils contracted, the conjunctiva responded to the touch, and the pulse returned at the wrist. Consciousness returned, and he asked questions. The inhalations were suspended, and a half-ounce of brandy administered. In fifteen minutes another attack occured, in which he died.—*New York Medical Journal*, July, 1874.—*Philadelphia Medical Times*.

CROTON CHLORAL IN NEURALGIA.—Croton chloral has been used by Dr. Jules Worms in various cases of neuralgia and other painful affections with considerable success. Dr. W. uses larger doses of the remedy than are usually administered. He thinks it unadvisable to be given hypodermically. The following formula resembles the one usually preferred by him:

℞ Croton chloral, ʒii;
Glycerin.,
Aquæ, aa f℥i f℥vi;
Syrupi, f℥iv;
Ol. menth. pip., gtt. iii.—M.

Sig.—Tablespoonful every three or four hours.

LET the thought of self pass in, and the beauty of a great action is gone, like the bloom from a soiled flower.

Gynecology and Diseases of Children.

Dilatation of the Cervix Uteri, particularly the Orificium Externum, by means of a New Instrument.

BY J. R. VANDERVEER, M. D., BROOKLYN.

So much has been said and written of the dilatation of the cervix uteri, that it seems almost presumptuous to add to the literature of the subject. I therefore beg the indulgence of offering a few very brief remarks on extensive *bilateral* dilatation of the os internum, and the advantages derived from the use of a new instrument, constructed for me by Tiemann & Co., of New York.

For some pears past, I have largely experimented in widening the cervical canal of the uterus, both for the relief of obstructive dysmenorrhœa and for the removal of the sterile condition, and in so doing I have used instruments each of service in its own way, but in every instrument made use of or examined the stress of dilatation was expended on the os internum, the middle of the cervix, or the whole of the cervical canal equally.

It was found that in *some* of the cases treated very little expansion of the os internum was called for; in a *few*, that probing and the subsequent use of the uterine sound was all that was required; but in *many*, the most obstinate resistance to *permanent* widening was encountered at the os tincæ, and the dense tissue adjacent: and the question was presented, Could there be *any* substitute for cutting, or the more recently practised method of forcible and rapid dilatation (in one operation) and the subsequent use of the stem pessary? In solution of the query, a series of trials resulted in the planning of the instrument herewith represented, which has thus far, in my hands, answered every requirement made upon it. I have had as yet no occasion to expand the os externum largely and forcibly by one single introduction of the instrument, but it could be used for such a purpose, should circumstances require it.

This instrument, it will be observed, dilates the os externum and cavity of the cervical canal *bilaterally*, and by its *probing* action keeps open the os internum. It will be noted, also, that its shape when closed approximates, and its diameter at its distal end does not exceed that of Simpson's sound; and also, that when in use the strain is

expended on its strongest part: and that it can be used without the speculum.

But by no means the least important of the advantages of the instrument is, I think, its comparative safety, owing to its small size when closed, and to the fact of its not seriously lacerating the os internum when open, and from the circumstance, that too severe tension upon any part under dilatation can be abated instantly.

Its use can be, of course, supplemented by stem pessaries and like appliances, or by what I have found answering the purpose very well, viz., a long laminaria tent with a shorter one introduced at each side, the whole kept in position by a suitable tampon of cotton-wool, with or without glycerine.

Briefly, in conclusion, this dilator is not offered as suitable to *replace* all instruments for widening the cervix uteri, but as a reinforcement, so to speak, to them, and to keep up permanent dilatation of the os externum, even after the use of the knife. I consider its *bilateral* action of great service likewise, as I believe the *transverse linear* os (externum) to be the normal one, even in the virgin, and the lengthened cervix with minute circular outlet (not extremely rare) to be most decidedly abnormal and analogous in some of its physiological conditions to phimosis in the male.

On the Combination of Opium with Chloral-Hydrate in the Treatment of Threatened Abortion.

In the *Bulletin de Therapeutique*, vol. lxxxiv., is summarized a case by M. Martineau, in which uterine contractions, occurring in a pregnant woman (seven months), treated successfully by opium, were immediately arrested by administration of chloral in the dose of 1 gramme, night and morning. M. Besnier (*Union Medicale, Gazette des Hopitaux*, No. 122) relates, in connection with this case, that of a primipara pregnant six months, and urgently threatened with abortion. Opium in high doses and under all forms not having produced any good effect, M. Besnier had recourse to chloral-hydrate in enema (2 grammes). The effect was rapid and very satisfactory, and each time the pains reappeared they were set at rest by the repetition of the enema; but, as they did not finally disappear, M. Besnier,

by advice of M. Tarnier, returned to the opiate treatment, which had to be continued for two days; it had no bad effect whatever, and the patient was saved from her threatened death. Investigating the mode of action of the chloral in these circumstances, M. Besnier concludes (with MM. Bourdon and Martineau), that chloral exercises different effects on the uterus, according as it is administered during accouchement or after threatening of abortion. In the first case it augments, and in the second it diminishes, and even suppresses, the contractions. According to Besnier, the myosthenic or amyosthenic effects produced must severally be referred to the different conditions of the uterus at the time of administration of the chloral-hydrate. In accouchement there is to be considered the excitation of cervix uteri by the head of the infant, which keeps up its contractions; these are even augmented as the consequence of the rest given to the womb by the cessation of pain, due to the administration of chloral. In threatened abortion, excitation of the cervix is absent: pain plays the chief part. Thus chloral suppresses the principal cause of the contractions. The whole importance of the drug lies in the analgesia which it produces. The action of the opium must also be taken into account in the case above cited. M. Besnier concludes that chloral is an excellent auxiliary to opium, when the latter proves inefficacious. — *London Medical Record*, March 18th, 1873.

Oat-Meal Farina as a Food for Infants.—MM. Beaumetz and Hardy recommend very highly the use of oat-meal farina in the feeding of young children. According to these gentlemen, this farina resembles human milk most closely in its plastic and respiratory elements, and contains, in addition, iron and phosphate of lime. It has, besides, the property of preventing or arresting the diarrhœa which so frequently occurs in young children. Some infants of four to eleven months, who were fed upon this farina, were found to grow equally well with those who were nourished by the milk of a good nurse.

God's ways seem very slow sometimes. But if we believe in God we should possess our souls in patience. In His own good time everything will come right.

Ophthalmology and Otology.

Mydriasis of the Right Eye--Persistent Pupillary Membrane of the Left Eye.

Minnie Schmidt, æt. thirteen years, of 910 Racine street, Milwaukee, Wisconsin, casually attracted my attention on May 26th, 1874, when she accompanied her father, who came to consult me about his own eyes. The iris of her right eye is reduced to a rim having about 1½ mm. in breadth everywhere except at its upper portion, where it is almost reduced to nothing, and only a very narrow band can be detected when the ball is directed upward. The larger iris-circle is brown, and looks normal, except being very narrow; the sphincter seems to be wanting entirely; in its place, the iris all at once becomes very thin, slate-colored, and on close examination appears slightly fringy, especially at its upper part, the axis of the fringes running parallel with the pupillary margin. On illuminating the mydriatic pupil with the ophthalmoscope, several punctate and very small linear opacities can be made out, situated in the anterior capsule or in the layers of the lens next to this membrane. The background is normal.

The visual power of this eye being tried with Snellin's test types, it was found to be about 20-50. The girl is not a proficient reader, and is not well developed, either mentally or physically; she looks like a girl ten years old. Her range of accommodation is normal, but the size of the diaphragm does not show the slightest change, either on the influence of light or on accommodatory efforts, this being a *demonstratio ad oculos* for me, who had never met with a similar case before, that the sphincter iridis has no influence whatever on accommodation. Notwithstanding the extraordinary size of the pupil, the eyeball is not more sensitive to bright light than a healthy eye.

The iris of the left eye does not show any deviation from the normal standard except a small protrusion, the size of a millet seed, taking its origin from the lower part of the free pupillary margin and projecting into the pupillary area. It is not adherent to the lens, as can be readily made out when the pupil is set moving by alternately covering and uncovering it with the hand. A more striking feature of this eye is a brown, disk-shaped membrane, having a diameter of about 3 mm., apparently composed of a net-work of very fine trabeculæ, being thinner in the

middle and presenting a fringy circumference, occupying the centre of the anterior capsule of the lens. A careful search does not reveal the slightest connection between this membrane and the iris. The acuteness of vision in this eye is about 20-70, somewhat less than its fellow. This figure is lessened considerably when bright light strikes the eye, because then the pupil contracts and permits no rays through parts unobstructed by the pupillary membrane. A few very small pearly dots are seen scattered in a plane somewhat behind tne abnormal membrane.

Examination with the ophthalmoscope is only possible when atropine is used in order to dilate the pupil; the fundus was then found healthy.

The father of the girl calls the difficulty with the left eye a "cataract," and says that the girl had a similar "cataract" in her right eye, but was cured by an old woman. It is possible that a pupillary membrane had persisted after birth in this eye too, and has since undergone absorption, leaving only a few dot-like opacities which I have mentioned above. I intend to watch the left eye, in order to detect any changes going on in the pupillary membrane.

The above case is sufficiently rare to justify its publication; I am not aware that a similar one has been reported in this country.—*The Medical and Surgical Reporter.*

Steam Treatment of Catarrh of the Middle Ear and Diminished Secretion of Cerumen.

BY A. M. WHITEHEAD, M. D., SPRINGFIELD, OHIO.

During the past year I have treated a number of cases of catarrh of the middle ear and diminished secretion of the ceruminous glands; and without giving a full report of the treatment of these cases, I will make a few statements relative to the efficacy of the vapor of warm water applied to the cavity of the tympanum by means of the Eustachian catheter, for diminished secretion of the ceruminous glands.

The first cose treated was a man aged forty years, whose hearing had been impaired about ten years. Upon examining the external ear, the auditory canal was found abnormally dry, with a congested and thickened condition of

the membrana tympani. The dryness was not artificial, as no instrument or syringing had been used to remove the wax. I supposed that the diminished secretion was caused by disease of the more deeply situated parts of the ear, and the vapor of warm water was applied to the middle ear of the right side by means of the catheter, and the air-douche was used for the ear of the left side. After treatment for one week the secretion of cerumen of the right side was increased to as much as would be expected in a normal condition of the parts, while the secretion of the left side remained unchanged until the steam was used, having the same effect to increase the secretion of cerumen as upon the right side.

The result of the treatment of this case, with a number of other similar cases which have come under my charge during the past year, has led me to regard steam applied to the cavity of the tympanum as a valuable remedy, not only for catarrh and impaired hearing, but for diminished secretion of the external auditory canal. I also think it confirms to some extent the prevalent idea that affections of the internal ear are connected with the diminution of the secretion of cerumen; that there is a physiological unity of the parts, and that they stand in dependence one upon the other.—*Cincinnati Lancet and Observer.*

ATROPHY OF THE TESTICLES FOLLOWING THE USE OF LARGE DOSES OF IODIDE OF POTASSIUM.—The *Gaz. Med. de Paris*, May 23, p. 269, quotes from the *Pabellon Medico* the following case coming under the notice of Dr. Juan Lomon:

A man of 27 had suffered from various manifestations of syphilis, among others, orchitis and paryngeal ulcerations. Under the influence of judicious medication by means of iodide of potassium and mercury, all signs of disease disappeared. About a year later, however, some ulceration appeared on the pharynx, and the patient, taking the case into his own hands, dosed himself with large quantities of the iodide. The ulcers were finally healed, but a twelve-month later he requested Dr. L. to examine his testicles. The right, on inspection, was found to have disappeared; the left was about the size of an almond. Coition was accompanied by pain, erection taking place slowly and lasting a long time. The duration of the venèreal act was much prolonged, and no emission of semen took place.

Public Health and Vital Statistics.

[The WESTERN LANCET will, in future, add a new department to its general system, as above entitled, and will collect as full reports on the subjects embraced in the department as can be obtained. We invite the profession throughout the State to contribute.—EDITOR.]

State Board of Health—Reform in County Hospitals.

The State Board of Health held its second quarterly meeting for 1874 on the 15th of July in Sacramento. There were present Dr. H. Gibbons, President, Drs. Montgomery, Stout, and the permanent Secretary, Dr. Logan. The Secretary made a statement in regard to the Solano County Hospital, located at Fairfield. Some complaints of neglect towards a patient had been published, which elicited from the physicians attending the hospital an invitation to Dr. Logan to visit the institution and investigate the case. The physicians in charge were fully exonerated, but defects more radical were disclosed.

The inquiries of the executive officer of the Board of Health informed him that the system of letting out the care of the patients to the lowest bidder was resorted to in Solano County; and secondly, that the tenement called "hospital" was a worthless building, inadequate to the required use. Charity thus administered is a mockery: the pittance, little as it is, so doled out, in the name of the people's offering to their own poor, is a waste of public funds. But, in this case, to the honor of the liberal-minded gentlemen of the Solano Board of Supervisors, they displayed, on the presentation of the facts by Dr. Logan, the utmost alacrity to correct the evils. They forthwith authorized and appropriated funds to Dr. Logan to employ an architect to make plans and specifications for a pavilion hospital, promising to select an appropriate lot for the building. They will probably also abandon the old discarded contract system of letting out the indigent of the county to the lowest bidder, unless it be for hospital supplies only. They will then conform to the spirit of the

age; and enable the honorable physicians in charge to illustrate its humanity.

The modern style of pavilion hospital permits the erection of a suitable building at a very small cost. It possesses all the requirements on a compact scale, and may be enlarged as the wants of the time demand. The fast increasing population and wealth of Solano County may well inaugurate this reform,—a reform which has the further advantage that it will serve as a highly recommendatory precedent for every other county in the State. The LANCET is convinced that the State Board of Health will cheerfully aid with hygienic advice as regards plans, ventilation, water supply, etc., etc., any such reforms as the Supervisors of other counties may request.

Circular.

OFFICE STATE BOARD OF HEALTH,
SACRAMENTO, August 15th, 1874.

To the Supervisors and Hospital Physicians of the various Counties in the State:

Complaints having reached this office of the generally faulty condition and mismanagement of our County Hospitals, I have been instructed, by a resolution of the Board I represent, to inquire into the matter and to adopt such measures as the circumstances of the case may, in my judgment, seem to require. Acting upon this authority, I have deemed it proper to submit this circular to the consideration of Supervisors, Physicians, and all others interested.

From the inquiries instituted it appears that the causes of complaint are found not only in the structural and dietetic provisions of these Hospitals, but also in their medical administration. In several instances the indigent sick are let out, *per capita*, to the lowest bidder, to provide hospital accommodations, nursing, diet, medical

attendance and medicines. That such a system of economical provision for the sick must necessarily lead to great abuses, and defeat the beneficent object for which these hospitals are designed, the facts of the case, as far as I have been able to ascertain, clearly establish. In one instance, to which my personal attention was recently called, the rented house, used as a County Hospital, was found to be old, dilapidated, and without ventilation, save nine little windows, in all, distributed in the six small rooms, into which the building was divided up, and which did not afford one-fourth of the *absolutely* requisite surface-area for the twenty-six patients crowded therein. The feeding, nursing, and medical attendance and medicines were also furnished by the contract system. On remonstrating with the Supervisors, who gave me a hearing at a subsequent visit, in compliance with the request of the County Physician, these Officials, I am now happy to say, soon became convinced of the impropriety of the system that had been pursued. Besides promising reform in the general administration of hospital matters, they fully authorized me to have such building plans and instructions prepared, as I might deem necessary for the indigent sick, at the expense of the County. Believing that the case cited is one among many, in which the same grievances obtain, and which, a little exertion on the part of the physicians and all others interested, is calculated to redress, I have thought it expedient to present briefly the arguments then adduced, in connection with other matters which the object of this circular suggests.

It is taken for granted, that the reason for the establishment of County Hospitals, is that, by aggregation, the sick may be restored to health at a minimum cost, because of the relatively small number of nurses, physicians, and other attendants that suffice for their care and treatment. Now the principles which underlie this proposition, both from an economic and humane point of view, and to the enforcement of which all other considerations should be subservient, exact, that the sick shall be, by this means,

restored to health as speedily as possible, and, above all, that the Hospital shall do the sick no harm. This latter condition, which was first enunciated by Florence Nightingale, several years ago, is predicated upon the fact, that it not unfrequently occurs that patients enter hospitals with simple diseases, or trivial injuries, and contract therein other, and more lingering maladies of which they often die. Thus the efficiency of a hospital is found, not in the large proportion of sick restored to health, but in the average time that has been required for this object. A hospital which restored all its sick to health after an average of three months' treatment, cannot be considered so well adapted to its purposes as a hospital which dis. charged all its sick recovered in as many weeks.—Besides this test, sanitarians and others who have devoted their attention to hospital reform, maintain that the origin and spread of diseases in a hospital, such as typhoid fever, erysipelas, hospital-gangrene and pyæmia generally, are much better proofs of the defective qualities of a hospital proper, than its statistics. The defects, to which such accidental diseases are attributable, are found to consist in unfavorable sites, improper plans, bad sewerage, want of ventilation and overcrowding; and it is to these important points, on which the efficiency of all hospital treatment depends, that I wish to call special attention. The wards of a hospital are unlike every portion of an ordinary dwelling, occupied day and night, inasmuch as in addition to the usual excretions, which are constantly escaping from the system through the lungs and skin, and which even in health are deleterious elements, become in disease more actively and even specifically poisonous. Suppurating surfaces throw into the air pus-cells in a state of decay—special diseases give out their special poisons, while the fæcal and urinary discharges, from so large a proportion of persons, add their foul influence to the decomposing organic matters, and make them still more dangerous.

The result of all this is that a pernicious atmosphere accumulates, which, if not continuously and rapidly

removed by adequate ventilation, sewerage and cleansing, soon pervades every part of the building, and after a longer or shorter period, depending upon the amount of air-space to each patient and the ventilation and cleanliness observed—the floor, walls, furniture and bedding become saturated with a miasm, which is capable of poisoning a large percentage of the inmates, and which, if it does not inflict other diseases than the one for which they were admitted, at all events lowers the vital force, and prolongs the original malady.

Now we have reason to apprehend that most of our County Hospitals, which have been constructed without a thought as to cite, drainage, ventilation or the prerequisite cubic space of air to each patient, are precisely in a condition presenting all the dangerous qualities alluded to. From such considerations, and in accordance with the advanced views of those who have studied the subject of hospitalism, it becomes imperiously necessary to provide a radical remedy—and that remedy consists in the abandonment of all contaminated hospitals—in fact, of all hospitals which have been in service more than ten years, and the construction of entirely new buildings, with all the essential requirements. Fortunately it so happens, as an additional incentive to the accomplishment of this end, that the most economical mode of hospital construction has proved to be the safest for the sick. What is now the so-called Pavilion-hospital, built entirely of wood, and calculated for only ten or fifteen years use, is everywhere superseding the substantial and costly hospitals which were wont to be built as "monuments for all time" of a charitable community.

Without extending these remarks to an inappropriate length at this time, and inasmuch as it is proposed to publish in the next Biennial Report of this Board, full instructions, illustrated by plans, for the construction and arrangement of the kind of hospital here advocated, I will simply refer to the recently erected City and County Hospital of San Francisco, as an example. A plan, conforming in all

essential particulars to this Pavilion-hospital, which is built of redwood, has been adopted by the Supervisors of Solano County, consisting of two detached wards of one story in height, capable of accommodating twenty-six patients, and connected by an open piazza with the approate offices and other rooms, which when constructed, will not cost over $8,000. The architect, Mr. A. A. Cook, of Sacramento, who has prepared this plan under my immediate supervision, will modify it to accommodate any number of patients, be it more or less, if called upon to do so, at a very moderate charge. I respectfully urge this method upon the attention, especially of all our County Physicians, as one dictated by every humane consideration, and calculated to do justice as well to the sick and suffering, as to their medical treatment. To faciliate the procurement of statistics, on which to predicate an opinion as to the sanitary conditions and remedial results of each hospital, suitable blank forms have been prepared, which it is requested will be returned, properly filled out, quarterly to this office. THOMAS M. LOGAN, M.D.,

Permanent Secretary State Board of Health.

California State Board of Health.

At a quarterly meeting of this Board, held July 15th, 1874, a letter from H. I. Bowditch, M.D., Chairman of the State Board of Health of Massachusetts, was read, announcing the death of George Derby, M.D., of Boston, and the following, offered by Dr. Logan, was adopted:

WHEREAS, The unwelcome intelligence has reached this Board of the death of our esteemed collaborator—the permanent Secretary of the first State Board of Health established in the United States; therefore be it

Resolved, That our permanent Secretary enter upon our record the high estimation in which the deceased was held by the California Board, and the regret we feel for the loss

of Dr. Derby to the profession, and especially to sanitary science.

Resolved, That a copy of this minute be sent to the State Board of Health of Massachusetts, and also to our medical journals, for publication.

THOMAS M. LOGAN, M.D.,
Permanent Secretary California State Board of Health.

MISCELLANEOUS ITEMS.

Board of Health.

The monthly meeting of the Board of Health was held yesterday forenoon. A communication was read from Dr. Lawlor, Resident Physician of the City and County Hospital, complaining that the new contractor for the supply of drugs and medicines, last week sent to the hospital various drugs which, in his judgment, did not meet the requirements of the schedule. He therefore ordered them returned, and called upon the druggist and gave his reasons for so doing. He also complains that he has been embarrassed by the Chairman of the Hospital Committee.

After some discussion the matter was referred to the City and County Attorney for his opinion as to whether the contractor is bound to furnish Tilden's or Suire's extracts under the schedule.

A resolution was adopted recommending to the Supervisors to increase the salary of Dr. Foster, of the Small-pox Hospital, to $100 per month.

After the transaction of some other unimportant business the Board adjourned.—*Alta*, July 31st.

VIENNA, August 1st.—The International Sanitary Congress has closed its session.

LIFE is a book in which we every day read a page.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, May, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	292	44	32	14	1	24	4	S. F. B'd of Health.
Sacramento	20	4	1	1	0	0	0	Sac. B'd of Health.
Petaluma	6	2	0	0	1	0	0	Dr. G. W. Graves.
Dixon	1	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	18	0	0	1	0	9	0	Stockton B'd Health.
Marysville	13	4	0	3	0	0	0	Dr. A. B. Caldwell.
Placerville	3	0	0	0	0	0	1	Dr. E. A. Kunkler.
San Diego	4	2	0	0	0	0	0	Dr. T. C. Stockton.
Oroville	...	..	..	..	..	..	.	Dr. J. M. Vance.
Los Angeles	32	5	0	2	0	0	0	Dr. H. S. Orme.
Truckee	2	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	2	0	1	1	0	0	0	Dr. C. F. A. Nichell.
Napa City	4	3	0	0	0	0	0	Dr. M. B. Pond.
Watsonville	3	1	1	0	0	0	0	Dr. W. W. Ross.
Folsom	1	0	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	...	..	..	..	..	..	.	Dr. C. L. Anderson.
Suisun, Fairfield	4	0	1	0	0	0	0	Dr. S. D. Campbell.
Colusa	0	0	0	0	0	0	0	Dr. Luke Robinson.
Trinity County	...	..	..	..	..	..	.	Dr. J. C. Montague.
Santa Barbara	16	1	0	2	0	0	0	Dr. C. B. Bates.
Redwood City	7	3	1	0	0	0	0	Dr. C. A. Kirkpatrick.
San Andreas	...	..	..	..	..	..	.	Dr. C. B. Robertson.
Auburn	5	1	1	1	0	0	0	Dr. A. S. Dubois.
Tulare County	...	..	..	..	..	..	.	Dr. M. Baker.
Siskiyou County	3	0	0	1	0	0	0	Dr. Daniel Ream.
Susanville	0	0	0	0	0	0	0	Dr. J. J. Sawyer.
Downieville	2	0	0	0	0	0	0	Dr. Alemby Jump.
Healdsburg	2	0	0	0	0	0	0	Dr. J. Bradford Cox.
Placer Co	8	1	4	1	0	0	1	County Recorder.
Alameda Co	22	6	0	2	0	3	0	County Recorder.

Remarks—Small-pox, of which mention was made in previous remarks, has proved incapable, as then predicted, of disseminating its invisible ferment—the dessicated air of our dry season being uncongenial to its life. This circumstance should not, however, induce us to relax in our efforts to stamp out the disease, before the wet season arrives to give an impulse to its activity. Judging from

the large proportion of deaths in Stockton from scarlatina, it would seem that this disease, which has been so long prevailing in San Francisco, has assumed the epidemic form also in the former locality. It will be observed that in none other of the above-named places in the table, has scarlet fever proved fatal this month. In furtherance of the plan proposed by us, we have to acknowledge reports of cases of sickness, for the month of May, by Dr. J. Bradford Cox, of Healdsburg, and Dr. C. F. Nichell, of St. Helena and Calistoga. In the former instance, among a population of about 3,500, scattered over some 100 square miles, 96 cases of sickness were noted, of which two died: one from idiopathic erysipelas, and one from softening of the brain. There was no prevailing type of disease. In the latter instance, among a population of 2,500, in an area of about 20 square miles, 49 cases of sickness are reported, of which two died: one from cancer of the stomach, and the other from abscess of the lungs. The usual varieties of disease were represented. Such reports will prove very valuable in establishing "sickness-rates," if kept up continuously; and we hope other correspondents will follow suit. Proper blank forms will be promptly furnished to all who may apply for them. THOMAS M. LOGAN, M.D.,

Permanent Secretary State Board of Health.

CHOREA IN THE NEGRO.—Dr. S. Weir Mitchell, of Philadelphia, in a communication to the *Medical and Surgical Reporter*, says that in a large clinical experience he has never met with a case of chorea in a colored child, nor have any of the physicians who have favored him with their own experience. From some portions of the South he received a like negative answer. He asks the profession for information on the following points:

1. If chorea is seen in dark colored children.
2. If it prevails more among mulattoes.
3. If it is very frequent or not in the South among whites, and at what seasons it occurs, or tends to recur.

Monthly Report of Deaths Registered in San Francisco during June, 1874.

Cause of Death.	Total.	Per Cent.	AGES: Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX: Male.	Female	NATIVITY: California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	1	....	....	...	1	....	..	1	....	....	....	....	1
Measles	....	....	....	....	....	....	..	...	....	...	....	....	....
Scarlatina	16	...	13	3	....	....	..	10	6	14	2	....	....
Diphtheria	....	....	....	....	....	....	..	....	....	....	....	....	....
Croup	2	....	1	1	....	....	..	2	....	2	....	....	....
Whooping Cough	2	....	2	....	....	....	..	....	2	2	....	....	....
Typhus and Typhoid Fevers	6	....	1	2	3	....	..	3	3	1	2	....	3
Diarrhœa and Dysentery	9	....	8	....	1	...	..	4	5	8	....	....	1
Cholera Infantum	18	....	18	....	....	....	..	9	9	17	1	....	....
Cholera Morbus	3	....	1	1	....	1	..	2	1	2	....	....	1
Pyemia	....	....	....	....	....	....	..	....	....	....	....	....	....
Cerebro-Spinal Meningitis	1	....	....	....	1	....	..	1	....	....	1	....	....
Syphilis	....	....	....	....	....	....	..	....	....	....	....	....	....
Alcoholism	5	....	....	....	3	1	1	3	2	....	1	....	4
2—Cancer	2	....	....	....	....	2	..	1	1	....	....	....	2
Phthisis Pulmonalis	45	....	1	3	38	3	..	30	15	4	6	10	25
Hydrocephalus & Tubercular Meningitis	6	....	6	....	....	....	..	3	3	4	....	....	2
3—Encephalitis	12	....	10	1	1	....	..	6	6	9	1	....	2
Apoplexy and Paralysis	7	....	....	....	2	3	2	5	2	....	3	....	4
Convulsions	13	....	11	2	...	....	..	7	6	11	2	...	...
Other Diseases of the Nervous System	12	....	1	2	5	3	1	11	1	2	5	....	5
Aneurism	4	....	....	....	3	1	..	4	....	...	1	....	3
Diseases of the Heart	13	....	....	2	10	....	1	11	2	2	4	....	7
Pneumonia	20	....	4	...	13	3	..	18	2	4	2	....	14
Bronchitis	3	....	....	1	1	....	1	....	3	1	....	....	2
Other Diseases of the Respiratory Organs	3	....	1	....	2	....	..	3	....	1	....	....	2
Diseases of the Stomach and Bowels	18	....	13	....	4	1	..	10	8	12	....	....	6
Diseases of the Liver	4	....	....	....	2	1	1	3	1	....	...	....	4
Bright's Disease and Nephritis	5	....	....	....	2	3	..	4	1	....	....	....	5
4—Puerperal Diseases	....	....	....	....	....	....	..	....	....	....	....	....	....
Atrophy and Inanition and Old Age	41	....	33	1	....	....	7	26	15	34	2	....	5
5—Suicides	8	....	...	....	8	....	..	8	....	....	6	....	2
Deaths in Institutions	65	....	10	2	43	7	3	52	13	10	7	3	45
Still-Births	....	....	....	....	....	....	..	17	10	....	....	....	....
1—Zymotic Diseases	69	20.11	47	8	11	2	1	38	31	50	7	....	12
2—Constitutional Diseases	58	16.92	10	3	39	6	..	35	23	11	6	10	31
3—Local Diseases	126	36.73	43	8	53	16	6	90	36	44	20	....	16
4—Developmental Diseases	50	14.58	42	1	....	....	7	32	18	43	2	....	5
5—Deaths from Violence	16	4.66	1	2	12	1	..	13	3	2	7	....	6
Deaths from Unknown Causes: Chinese	23	6.71	1	....	17	4		21	2	1	....	22	....
Deaths from Unknown Causes: Others	1	.29	....	....	...	1	..	1	....	...	....	....	1
Total	343	.....	144	22	132	30	14	230	113	151	42	32	116
Per Cent. to Total Mortality	....	100.00	41.98	6.41	38.48	8.75	4.37	67.06	32.94	44.02	12.25	9.33	33.82

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Monthly Mean Temperature of Santa Barbara, California.

From a circular of Mr. Morris, of Santa Barbara, we extract the following table, also the rain-fall, by Dr. Shaw:

	January.	February.	March.	April.	May.	June.	July.	August.	Sept.	October.	November	December	
Mean Temperature..	50.13 | 67.03 | 49.74	47.10 | 59.00 | 49.80	55.22 | 66.80 | 56.00	58.13 | 67.53 | 55.90	61.13 | 68.61 | 57.81	64.10 | 72.30 | 60.57	64.68 | 74.58 | 63.45	65.75 | 79.24 | 64.19	60.45 | 78.72 | 61.83	57.62 | 70.00 | 56.25	53.72 | 67.73 | 56.28	47.64 | 60.48 | 50.83	Mean Temperature.
Monthly Mean Temperature...	55.63	52.01	59.34	60.52	62.52	65.66	67.57	68.76	65.34	61.36	59.23	52.98	Mean for the year 60.90.
High'st Tempr'ture	76.00	67.00	76.00	80.00	78.00	80.00	86.00	82.00	83.00	82 00	82.00	68.00	Highest Temperature.
Lowest Temperature	42.00	40.00	48.00	46.00	54.00	58.00	58.00	61.00	56.00	50.00	46.00	40.00	Lowest Temperature.
Rain Fall, record of Dr. Shaw.....	0.58	5.48	0.05	.....	.....	.....	.....	.....	.....	.....	0.27	4.99	Total Rain Fall, 11.37 inches.

Editorial.

Medical Diplomas.

The endowment by the General Government of the United States of the University of California, with ample funds wherewith to establish a State Educational Institution; its now permanent foundation; the respect now universally accorded to it; and the cordial support and encouragement it receives from the people, as expressed through the Legislature of the State, should render the University of California the most reliable arbiter in the great educational system in which the welfare of the people is concerned. Inaugurated by the people, to it will the people look for counsel; paid for by the people, in it they will place their confidence. Until the population of the State becomes so great as to be too cumbersome for one Institution to manage, the one University should suffice for the educational degrees which are represented by a diploma emanating from a chartered college. Such a diploma should receive from the people a higher consideration than diplomas issued from any other source.

Unauthorized, and uninvited by any authority whatever, the LANCET will, of its own preference, advocate this view. For the time being, at any rate, we believe that one University, as the exponent of the educational system in all its departments, and the choice of the people, should suffice. We further believe that the Legislature would best subserve the public interest by withholding in the future the issue of charters to any other colleges. Let the parent protect its own. In this there is nothing aristocratic or arbitrary.

The education of the present day calls for immense expense in its dispensation. Special departments require special appliances. And nearly all demand the aid of costly instruments for their illustration.

A simple lecture-room is no longer sufficient for the display of object-teaching, nor can the education of scientific

facts be made lasting on the memory and interesting to the mind, without visual illustrations to strengthen them there.

The University, with its immense endowment, is alone able to furnish these resources. Universal education now-a-days is a vast engine, composed of many parts, co-operating to instruct and guide the nation. It is the motive power which vitalizes the will of man. Without it a genuine Republic cannot exist. Ignorance is the parent of Communism.

Over the exponents of education in medicine, therefore, in the State, the University may have an eye, and to its supervision the question of medical diplomas may, for the benefit of all seriously interested, be safely intrusted.

In accordance with this general idea, we venture to suggest, and even solicit, that the Regents of the University take into consideration the propriety of opening a general register, or record of medical diplomas for the whole State.

This register should be accessible to the public when it may be desirable to examine into the authenticity of the diploma of any person practicing medicine in the State. We propose, thereby, that every physician in the State shall be invited, with only nominal expense to himself, to submit his diploma to the inspection of the University, and have the same recorded in the register, and receive a certificate of the fact. By the University is meant an officer authorized by the Regents, but not the medical department of the University. It will be preferable for each physician to present his diploma in person, but if he be located too remotely, he may record it in the County Recorder's office, and send a copy certified by himself and a Notary Public. In this manner may every physician in the State, no matter from what country he comes from, place his credentials before the public without compromising his professional dignity, and receive full honor to his diploma without any further medical examination.

Let the University adopt this course, and the faculty of its medical department cheerfully lead the van in this

registration. At the next session of the Legislature a statute may be passed making the registration an indispensable legal necessity, and applying a severe penalty to any who shall practice medicine in the State without a collegiate diploma. The present medical faculty of the University will then satisfactorily prove the validity of their right to hold their present position. To such a tribunal, every physician, honorably practicing his profession, may cheerfully, and enhancing to his dignity, submit his claim to public confidence.

We hope no physician in the State will condescend to submit his credentials to any self-constituted authority, or any less important tribunal.

We do not presume to enter into all the details of such a system, but certain it is that an officer or officers so selected by the Regents of the University from their own body, would quickly become experts in judging the genuineness of both home and foreign diplomas. The system would be someweat onerous to the profession in its inauguration, but this trouble would lose its importance when compared with the immense advantages to be obtained in the present excited state of public feeling on the subject of medical diplomas.

The University of Giessen.

Before we throw stones, let us fortify our own glass houses. It is well understood in the medical profession, that many of our chartered Colleges throughout the Union, from the very easy terms upon which they issue diplomas, and the feebleness of the institution, both as regards the capacity of its faculty to teach, and limited financial resources, are significantly termed "doctor mills;" and to them is attributable much of the inefficiency complained of by the public, of a goodly number of diploma-bearing doctors.

The University of Giessen, one of Germany's most ancient foundations of learning, is a school of philosophy, law, and theology, as well as of medicine. It was founded in 1607. In 1858, there were 380 pupils attending its lectures. The library contained 36,000 volumes. It possesses an observatory and a botanical garden. The world-renowned Liebeg established in this University, his famous school of chemistry. Prior to 1851 its class of students was larger than at present, owing to the fact that its Roman Catholic faculty retired and became located in Mayence. Hence, whatever derelictions as exceptional cases may have occurred, its honored diplomas date from 1607 to the present time.

This old University of Giessen, however, has rightfully enough fallen into disrepute out of its Fatherland, and bears the disgraceful stigma of selling diplomas to any purchaser without questioning his medical attainments. Let us endeavor to analyze this question and search its truth.

The University of Giessen we believe to be one of the oldest in Germany, and to possess a Faculty of highly competent professors. It draws to its halls a large class of students whose diplomas are honored in Germany. This University, like others in Germany, issues diplomas under several different conditions: 1st. Its regular diploma to students who fulfil their curriculum in that College. 2d. To students who show certificates from other colleges of advancement in their medical education, and perform a part of their own curriculum. 3d. To students who show certificates of advanced proficiency from any foreign college and will submit to and endure their own examination for a degree.

This examination may be obtained in a single day, or after a few weeks residence in Giessen. The examining ordeal may be conducted in any language, Orientalists from Asia, Hebrews and Greeks, who only speak the modern dialect of their country, the Latin nations, the English and French, will all find linguists to examine them in their native tongues.

The expense of this diploma is about one hundred dollars, which is very high, when it is remembered that it is the fee which was required in Germany before the flood of California and Australian gold raised the prices of all things in Europe.

4th. A diploma designated "*in absentia.*" This is the diploma which has caused disgrace to fall upon the otherwise honored halls of Giessen. To obtain it, it is necessary to forward an original medical essay, to prove capacity, and certificates or personal assurances of some influential party, of the candidate's ability, and to pay a certain stipulated fee, how much or how little, we do not know.

These requirements, so open to fraud and forgery, and the partiality of friends, cannot be easily tested by the faculty of Giessen, and hence it is that, from this variety of diploma, so many impostures of foreign source are inflicted upon the American public; and, we learn, still more freely in some other countries.

These diplomas from Giessen, moreover, bear upon their face, this qualifying designation, and any expert in German diplomas recognizes the difference. It is in this manner that the faculty of Giessen defends its character by expressing on the face of its diploma the conditions of its issue.

We can now see that, after all, the University of Giessen is constituted on the same foundation, more or less legitimate, as are the colleges of our own country. The ordeal of examination is probably more difficult than the "rigorosum" of many of our colleges, and especially in obtaining the diploma we have named under the 3d class of conditions.

Doubtless, it is owing to the abuses of the terms on which the diploma "in absentia" could be obtained, that since 1866, that privilege has been suppressed in Germany.

HOLD every day solitary converse with yourself.

Obituary.

We have received the memorial address of Professor J. W. Hatch, M.D., in memory of Edward M. Curtis, M. D., deceased, read before the Sacramento Society for Medical Improvement. Its length precludes republication, and mention of Dr. Curtis' demise has already been made in the LANCET; but the address is warm with the merited praise of affectionate friends, and is an elegant tribute to his moral worth and professional ability.

The best proof of his intellectual worth is derived from his rapid promotion in the army from the rank of a private soldier, in the 1st Vermont Regiment, to that of Brigade and Division Surgeon of the 4th Vermont Infantry.

The patriotism which inspired and conducted him through the war of his country was again illustrated by his devotion in the more protracted war of his profession against disease and death.

Miscellaneous.

A Case of Complete Stricture of the Large Intestine.

BY K. T. STABECK, M. D., DAVIS, ILL.

Mrs. A., æt. 40 years, was treated for anteversion of the uterus for the past two years. For two months she wore one of McIntosh's supporters, but without any satisfactory results. Last October she was troubled with constipation of the bowels, and began to use various pills put up by patent-medicine men, with the result of irritating the mucous membrane of her stomach and intestines. This trouble increased up to January, 1874. At times she would be very constipated, and could pass nothing without the use of violent purgatives. There were also more or less swelling and tenderness on pressure. The symptoms increased, and in the latter part of February she was seriously ill. There were very great tympanities and frequent

vomiting; food being thrown up almost always two or three hours after it was taken.

Cathartics and injections were administered, but gave no relief. For a period of two months she had no passage from her bowels. For seven months she vomited fæces every day. She failed gradually, but without apparent inflammation of the peritoneum or intestines, and died in March from exhaustion. Post-mortem examination revealed a complete stricture at the angle of the transverse and descending colon, where there was a fibroid growth, not ulcerated, and apparently springing from the coats of the intestines.—*Medical Times.*

LONGEVITY OF MEDICAL MEN.—The London *Medical Times and Gazette* lately argued that medical men in England stand high on the scale of longevity. The united ages of twenty-eight physicians who died last year amount to 2,354 years, giving an average of more than 84 years to each. The youngest of the number was 80, the oldest 93; two others were 92 and 89 respectively; three were 87, and four were 86 each, Sir Henry Holland being one of the latter. There were also more than fifty whose average age was between 74 and 75 years.—*Medical and Surgical Reporter.*

Book Reviews.

A TREATISE ON FOOD AND DIETETICS—PHYSIOLOGICALLY AND THERAPEUTICALLY CONSIDERED. By F. W. Pavy, M.D., F.R.S.; Fellow of the Royal College of Physicians; Physcian to, and Lecturer on Physiology at Guy's Hospital. Philadelphia: Henry C. Lea; San Francisco: A. Roman & Co.

Pavy, whose name is doubtless familiar to most medical readers, has produced in the book before us a work much needed, it being a "systematic treatise on food." Much has heretofore been written on this subject, but never

before has so systematic and thorough a result of mature thought and experience been given to the professional world. A perusal of the pages of "Pavy on Food" will amply repay all, but none so much or richly as the medical practitioner.

This subject has never received that attention by the physician its importance demands, and yet no true physician fails to appreciate the value of a proper attention to dietetics in the sick-room; and now that so simple and yet scientific a work as the one before us has been furnished, no excuse can be given for that ignorance which, we regret to say, has characterized the profession in this direction; and it is to be hoped that every medical man in the country will avail himself of the opportunity offered of studying the subject thoroughly. No medical library can be considered complete now without a copy of Pavy on its shelves.

INFLAMMATION OF THE LUNGS, TUBERCULOSIS AND CONSUMPTION. TWELVE LECTURES. By Dr. Ludwig Buhl, Professor of Pathological Anatomy and General Pathology in the University of Munich, etc., etc. Translated by permission, from the second German edition, by Matthew D. Mann and Samuel B. St. John, M.D. New York: G. P. Putnam's Sons; San Francisco: Payot, Upham & Co.

Since the publication of Niemeyer's work on similar subjects, we have seen no book presenting so many points of interest as the one before us, treating of consumption and pneumonia. Indeed, it would seem that the peculiar views advanced by Niemeyer have led in some measure to the publication of Professor Buhl's book. The ideas advanced by Niemeyer excited comment and research in Germany amongst the savans of the profession, and the volume before us contains views and arguments not before presented to the world. The same interest that has been exhibited in behalf of Niemeyer we bespeak for Professor Buhl's work, which, though a volume of but one hundred and six pages, yet is full of interest, and should be read by

every man who wishes to be well informed on the all-important subjects of pneumonia, tuberculosis and consumption.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA FOR 1874.

This work appeared July 15th, 1874. Reviewers are solicited in the Report of the Publication Committee to be very economical of their toxophilithic "armature." Surely a kind word in time is soothing. The etherized Titans will subside into a *dulce farniente* anæsthesia, and refrain from their proclivity to saxalithic jactation. The LANCET, therefore, is somnolent upon the æsthetic taste displayed in the vignettes which illustrate the work.

The State Society numbers 242 members. The present volume of Transactions contains seventeen valuable reports of committees and original contributions. There are ten standing committees, with a corps of fifty workers, exclusive of the Committees of Arrangements and Publication. About one-fifth, therefore, of the members are engaged in active duty. This force should ensure a rich harvest for the next annual meeting.

No abstract of the very interesting reports will be attempted, because we consider that every regular member of the profession ought to feel it his duty to become a member of the State Society, and thus ensure to himself the articles in full. We hence refer those who desire the information to the Secretary of the Society. When measures of utility to the public or the medical profession are called for, it is mainly through the Legislature that their enactment can be obtained, and the voice of the whole profession heard as a unit, through the State Medical Society, would not fail to possess great influence over the mind of a legislative body. It is in the interest not only of members of the profession individually, but of the public, of science and of philanthropy, that every medical man in the State should associate himself with the State Medical Society.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR SEPTEMBER, 1874.

Original Communications.

Case of Ovariotomy.

BY JOHN SCOTT, M. D.
Surgeon-in-Chief California State Womans' Hospital.
[Reported by GEORGE CHISMORE, M. D., House Physician.]

Mrs. E. B.——, æt. 34; admitted July 7th, 1874; Dane; machine sewer; married twice; first time, eleven years ago; lost her husband in three months; married again in 1868; three children; one by first husband; last pregnant five years ago; no abortions; last medical attendant Dr. O. O. Burgess.

State on admission—Rather tall; sallow, muddy complexion; "Ovarian facies" well marked; extremely emaciated; habits good; skin soft; extremities cold; subject to profuse perspiration; no glandular swelling, ulcers, eruptions or varicose veins; some œdema of the ankles; no mammary areolæ. Abdomen enormously distended; measuring from ensiform cartilage to umbilicus, 15½ inches; from umbilicus to symphysis pubis, 11½ inches; from ant. sup.

sp. processes of each ilium to umbilicus, 12½ inches; girth at umbilical level 43 inches; 3 inches above umbilicus, 46 inches; through the thin abdominal walls a large tumor fixed by very extensive adhesions could be felt; palpation and percussion clearly showed it to be divided into a solid mass above, and a large cyst below; no crepitation and but little tenderness; lumbar regions moderately resonant; thoracic cavity greatly encroached upon. Protruding from the vulva there was a smooth rounded tumor as large as a fœtal head at term completely filling the genital fissure and evidently consisting of a portion of the cyst, covered by the prolapsed posterior vaginal wall. The catamenia have been absent for the last nine months, but previous to that were regular, though rather scanty; no leucorrhœa. There has been dysuria for the last three years, but it ceased about a month ago. In the last 24 hours only five oz. urine were voided. It was ropy and turbid; pale yellowish color; acid reaction; sp. gr. 1,020; no albumen or sugar: abundant pinkish deposit which, under the microscope, was found to consist principally of urates and mucus. Tongue red, swollen, dry and apthous: appetite poor; constant thirst; much flatulence; bowels regular; sleep broken and unrefreshing. Some erratic neuralgic pains, but no hysteria; she bore her sufferings with remarkable fortitude and cheerfulness. Breathing natural while at rest; no cough or expectoration; rests best on right side; heart and lungs normal; pulse, 140; temperature (under the tongue) 100°.

History—Family all healthy and long-lived. She had palpitation of the heart and "fainting spells" during her girlhood; otherwise her health was good until after the birth of her last child, when she began to suffer severe "bearing down" pains, and the tumor now present made its appearancé at the vulva. She supposed it to be "falling of the womb." Three years ago she noticed for the first time a "lump" high up in the epigastrium which grew rapidly *from above downwards*, and became tender and painful. She enlarged rapidly and was tapped the first time a

month after. She has had several severe attacks of inflammation, attended with great pain in the sides, and much tenderness over the whole abdomen. Has been tapped twenty times, losing from four to six gallons each time. Lately she fills in fifteen to eighteen days. The fluid removed on each occasion, with one exception—when it was somewhat bloody—was similar in character, resembling size, or unclarified honey, and on standing became covered with a fat scum. Last tapped eleven days before entering the hospital.

Treatment—On the day after her admission an aperient was given which acted freely. On the 9th, alarming symptoms of prostration from extreme distention appeared; fearing the tumor protruding from the vulva would burst, it was punctured with a fine needle, and by means of the aspirator four gallons of fluid, similar to that before described was withdrawn. It formed a solid, white coagulum when boiled, was neutral in reaction, and of sp. gr., 1,014. Under the microscope granular cells, oil globules and crystals of a substance supposed to be cholesterine, were found. Her condition was very unfavorable ; pulse 140 ; hands and feet cold ; temp. 98.5° In two days she had nearly filled again ; symptoms of blood poisoning appeared, and the case seemed hopeless. It was clearly evident that an operation, if unsuccessful, would shorten her life but little.

On Saturday, July 11th, in the presence and with the assistance of Dr. J. H. Wythe, Dr. E. Bently, Dr. Chas. McCormick, Dr. O. O. Burgess, Dr. R. B. Cole, Dr. F. Bazan, and the House Staff, Dr. Scott proceeded to remove the tumor. The Assistant Surgeon, Dr. Chas. Blake, administered the anæsthetic, using ethyl until she became unconscious, and ether afterwards. The incision was about 10½ inches in length, and extended from two inches above the umbilicus nearly to the symphysis pubis. The tumor proved to be a proliferous cyst, surmounted by a large, nearly solid mass, containing here and there small cavities filled with semi-fluid mucoid matter. The walls of the

present cyst were thin, and so easily torn that in spite of careful handling it burst in several places, and some of the fluid escaped into the peritoneal cavity. Its fluid contents were estimated at about five gallons. The adhesions were so extensive and intimate that the peritoneum was detached from the abdominal wall to a small extent on the right side, before the mistake was discovered. Above the solid tumor was firmly attached to the stomach, liver and spleen, over a large extent of surface by strong fibrous bands. The omentum was extensively adherent to tumor, and a large portion of it was removed by the clamp and actual cautery. Several vessels were tied with carbolized silk, and the ends cut short. The tumor sprang from the left ovary and was attached by a broad thick and short pedicle. This was strongly compressed by Baker Brown's clamp, and divided by the actual cautery; a bleeding vessel in one portion was tied, the ends cut short and the stump returned to the cavity. The intestines were injected, red and angry; peritoneum generally inflamed; in places almost sloughy; uterus and right ovary healthy. The peritoneal cavity was very carefully sponged with a solution of carbolic acid and water, (1 to 80), a slightly curved glass tube $\frac{5}{8}$ inches in diameter and $4\frac{1}{2}$ inches long, was used for drainage; one end was placed in the cul de sac of Douglas, and the other brought out near the lower angle of the wound, which was closed by carbolized silk sutures. The whole operation lasted exactly one hour. The solid portion of the tumor weighed $10\frac{1}{2}$ pounds, and the inner surface of the parent cyst was studded with a great number of small endogenous cysts. The entire cyst, with solid and fluid contents, weighed over 50 pounds.

She rallied well, but complained of a severe pain in the back; this gave way to an enema of tinct. opii m.xx., and she passed a tranquil night; no vomiting or pain; free from thirst for the first time for many months; at 9 P. M. pulse 120; has fallen eight beats since operation; temp. 99°; diet restricted to barley water and milk, with ice to suck when called for.

12th.—Tongue, red, dry and apthous; vagina very hot; the posterior wall which was still protruding from the vulva last night, has nearly resumed its normal position; some jerking of the muscles; does not complain of any pain; slight discharge of bloody serum from drainage tube; urine normal; catheter passed every six hours; at noon temperature commenced rising; pulse A. M. 120, P. M. 130; temp. A. M., 100°, 7 P. M. 100½, 9:30 P. M., 101¼°. Resp. 18, ℞. Tr., verat. vir. m.iv. every three hours; one leech to vaginal wall; dress wound with carbolized oil; sol. acid carbol, (1 to 80), injected into peritoneal cavity through tube; opiate enema if required; diet, barley, water and milk.

13th.—Patient passed a good night; throat somewhat sore; omitted verat vir. at noon; continued dressings and injection; enema of 20 drops tinct. opii per rectum, night and morning; pulse A. M., 137; P. M., 87; temp. A. M., 100°; P. M., 99¼; respiration 18.

14th.—Patient passed a good night; ordered 6 oz. warm milk every three hours; continued treatment; pulse A. M., 120; P. M., 104; temp. A. M., 99°.

15th.—Fair night; discharge from drainage tube offensive and quite free; slight swelling of right parotid gland; tongue still very unfavorable, red and dry; continue treatment and diet; pulse A. M., 120; P. M., 112; temp. A. M., 99°; P. M., 98¾; resp. 20.

16th.—Swelling of parotid gland greatly increased; some bleeding from point where a suture was removed, arrested by Monsel's salt; discharge continues free and offensive; pulse A. M., 114; P. M., 120; temp. A. M., 99°; P. M., 99°; resp., 20. ℞. Quiniæ, sulph. gs. x. morning and night; ½ oz. of brandy every four hours; liniment. iodini to parotid gland; continue dressing, injection and diet; removed four sutures.

17th.—Slept poorly; well under the influence of quinine; tongue moist and cleaning off; urine which now passes naturally, smoky and scanty. Swelling of parotid gland decreasing; some bagging of right side of abdomen;

removed drainage tube; discharge free and becoming laudable; continue dressing and treatment; pulse A. M., 112; P. M., 107; temp. A. M., 98½°; P. M., 99½°; resp., 22.

18th—Good night without an opiate; tongue quite natural; a pharyngeal abscess burst and discharged; appetite good; had a mutton chop to-day; bowels moved; good healthy stool without pain; urine again clear; discharge decreasing; continue treatment and dressing; add to diet meat and soup; pulse A. M., 116; P. M, 96; temp. A. M., 98½°; P. M., 99¾°; resp., 20.

19th.—Discharge slight and laudable; no pains; feels very well; stop brandy; reduce dose of quinine to five grains; continue dressing; removed remaining sutures; pulse A. M., 97: P. M., 97; temp. A. M., 98½°; P. M., 98¼°; resp., 26.

20th.—Small bed sore over the sacrum: apply styptic collodium and use air cushions; continue treatment; pulse A. M., 90; P. M., 90; temp. A. M., 98.6°; P. M., 98¾°.

21st.—Bed sore increasing in size very fast; increase the dose of quinine to ten grains and resume the brandy; dress sore with carbolized oil; but little discharge from abdominal womb, which is now healed except at the lower angles.

22d.—Bed sore looks better; process of destruction arrested; continue treatment.

August 3d.—Patient has been doing exceedingly well; tongue clean; appetite good; sleeps well; pulse and temperature normal; sat up to-day for the first time.

August 30th.—Patient has continued to improve; quite an abscess formed in the abdominal wall below where the peritoneum had been detached, and discharged laudable pus freely; but it gave rise to very little suffering. The bed sore is still open, but is healing slowly; the appetite is good; tongue clear; bowels regular; pulse and temperature normal, and she is slowly gaining flesh; there is still a slight discharge of pus from the lower angles of the incision.

September 16th.—Still improving; sits up and walks about; is putting on flesh every day; bed sore almost well; pulse and temperature normal; no discharge from the wound, which is now quite healed. She will be discharged in a few days.

REMARKS BY DR. JOHN SCOTT.

There are some features in the above case worthy of attention, as tending to obscure a diagnosis on the part of previous medical attendants, which is not ordinarily attended with much difficulty. When my friend Dr. Burgess asked me to see the patient, he had only been a short time in attendance and had made no particular examination, but we learned from her and her husband, that she had been for a considerable time under the care of a justly eminent surgeon of this place, and that he had pronounced her case utterly hopeless; that a surgical operation was totally unwarrantable, and must end in death, and this opinion was concurred in by others. They stated that they thought the solid tumor so intimately connected with the spleen, as to make its removal impossible, and besides, that it was probably malignant in its nature. This opinion was probably founded on the explicit statement of the patient that the tumor had originated *above* and had grown downward. But its incorrectness was fully demonstrated by the history obtained by Dr. Chismore, of the existence of a tumor at the vulva which had appeared long anterior to the solid tumor. She had supposed it to be a prolapsed uterus, and singularly enough her medical attendants had not deemed it necessary to make a vaginal examination, which would have removed all doubts in the matter of diagnosis. It was not a little singular that the abdominal cyst should have dissected its way between the uterus and rectum so completely as it had done—a circumstance so unique that I do not remember the record of any similar case elsewhere. Considering the condition of the patient when operated on, extreme emaciation, the existence of blood poisoning, the extensive parietal and omental

adhesions, and the existence of strong fibrous bands attaching the solid mass to the liver and spleen, I think we may regard the immediate and ultimate results of the operation as singularly satisfactory. Beyond half an hour's severe pain in the back immediately after the operation, and which was entirely removed by a small opiate enema, the patient has had no suffering whatever, and has steadily progressed toward recovery. There was no after vomiting, no tympanitis, no derangement of the stomach or bowels, and all she has had to contend with was from septicimea, already in existence, as evidenced by the inflamation of the parotid gland and the pharyngeal abscess, but which readily gave way under the influence of quinine, brandy and small opiate enemas. This singular immunity from subsequent danger, I attribute largely to the drainage tube, which gave exit for a week to quantities of fœtid serum which would otherwise have poisoned the system; and I think Dr. Marion Sims has done great service in insisting on the necessity of drainage in all such cases. I would also draw the attention of the profession to the very happy effects of the new anæsthetic ethyl, which were demonstrated in this case. Only four drachms were needed to produce profound unconsciousness, and only 6 ounces of ether were required to keep it up during the entire operation. There was none of the distressing struggling so constantly witnessed where chloroform or ether is given. Complete anæsthesia was produced in about seven minutes, and there was none of that subsequent vomiting which so often occurs in these cases. Ethyl is a combination of equal parts of bichloride of methylene and ether, of sp. grav. 720. It is, I believe, as safe as any anæsthetic can be, and I have now used it in about fifty cases without a single drawback. In conclusion, I beg to tender my best thanks to General Hewston, who was good enough to manufacture himself the glass drainage tubes I was unable to procure elsewhere.

SOME men are fitter for a corner than a full light.

A Rare Form of a Congenital Cystic Fibroma Molluscum of the Elbow.—Removal by Operation.—Successful Result.

BY CHARLES B. BRIGHAM, M. D., HARV., SAN FRANCISCO.

J. W., æt 5 years.—The patient was born with a tumor on the left arm, situated over and just below the elbow joint, on the inner and posterior part of the limb. At birth, this tumor was about the size of a hen's egg, soft, and marked at the most prominent parts of its surface, with a delicate, naevus-like congestion of the superficial vessels, slightly raised, and giving the skin in that part, a dark violet appearance ; there were also hairs of perceptible length, growing amid the congested vessels. The tumor remained about the same size during the first two years, but in the third year it began to increase, and now it has reached a size given below (4 inches in length, by 7 in circumference); it presents to the eye the same general appearance as at birth, only it is larger and more lobulated—its limits are tolerably well defined ; the skin over it is somewhat lax and natural in appearance, except at the discolored portion, which now measures two inches by three, and has many hairs upon it, half an inch in length. To the touch, the tumor is lobulated and very soft, with no pulsation whatever, but with a distinct fluctuation in certain parts. The lobe nearest the wrist, appears almost detached from the main tumor, and it is in the direction of this lobe that the tumor increases burrowing as it were, under the skin. The tumor is adherent, to a certain degree, and when pressed laterally between the fingers, it gives a sensation as if there were a hard substance in its centre; this hardness was afterwards shown to be due to the dense fibrous stroma of the tumor. The patient has no other tumors or spots on his body; he had repeated falls upon the arm, making the tumor "black and blue," and it was a severe bruise that at last influenced the father of the child in favor of an operation. It was explained to him that the tumor was situated between the

skin and the muscles, that it probably had no connection with any large vessels; that its contents were serum, and not blood, as he had supposed; that the elbow-joint was as yet unaffected, and that, if the tumor were removed, the motion in the joint would be in no wise impaired. Thus assured, he consented to its removal, and indeed expressed his desire to have had the operation done ever since the birth of the child. On the 6th of August, Dr. G. J. Vanvlack assisting, the patient was anæsthetized. Ethyl was used at first, and in less than two minutes, the patient was completely insensible; ether was then substituted, and continued throughout the operation. An elliptical incision three inches in length, was made on either side of the discolored portion of skin; both flaps were then carefully dissected up, so as not to open the cysts in the operation. On the outer side, the tumor was covered by a thin layer of skin, with little, if any, fat; a fact which led to the supposition that the tumor began its existence from that side, and also very early in uterine life, when there was but mucous tissue beneath the skin. On the inner and lower sides, the tumor was enveloped in fat, three or four small vessels were temporarily compressed; no artery of any size was seen; the hæmorrhage, which was slight, was mainly venous; the tumor lay on the muscular aponeurosis, attached at two points; the subjacent muscles were much flattened by the pressure from the tumor; the sides of the incision were brought together by fourteen sutures, and the wound was then dressed with Lister's dressing.

The tumor measured four inches in length by seven in circumference; it was made up of cysts and fibrous stroma, the cysts being the hypertrophied areolar spaces of the connective tissue, while the stroma represented the dividing septa. There were three large cysts, side by side, much the size and shape of a testicle, and many smaller ones, from the size of a pea upwards. The contents of two opened cysts were as follows: the one of clear amber-colored serum; the other, and larger one, of bloody thickish serum (doubtless not the original color of the cyst

contents, but resulting from an effusion of blood caused by the severe fall upon the tumor). The inner walls of the opened cysts, strikingly resembled those of a ventricle of the heart, there being a surrounding network of trabeculæ. There was no point of connection between the cysts; there were no arteries of appreciable size, connected with the tumor; microscopic examination showed a tissue made up of curled white fibres; the tumor weighed four ounces.

The sutures were removed from the wound on the 9th, and strips of court plaster substituted; there was no swelling of the arm or hand. The wound was again dressed on the 12th; its lips had slightly separated, but were firmly adherent to the subjacent tissue. The patient suffered no pain; the wound was just cicatrizing, when, on the 19th, a slight redness was observed near the wrist; there was no swelling, but considerable pain; the whole arm was then enveloped in a flaxseed poultice; the redness extended to one side of the wound; a slight swelling near the upper end of the incision was lanced, and gave exit to a few drops of pus. In a few days the redness subsided; the arm was bathed daily in warm soapsuds; the poultices were continued up to Sept. 4, when the wound was wholly cicatrized; the arm has perfect movements.

The study of the pathology of the congenital fibroma molluscum is not without interest; closely allied to certain forms of elephantiasis, it differs from them not histologically, but in the manner of formation, inflammation invariably preceding elephantiastic growths (Alfred Heurtaux, Fibrome, Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques, vol. xiv., p. 677). Again, the fibroma molluscum originates essentially in the connective tissue, while elephantiasis may invade all the tissues. The former tumor is bulging and oval, its shape is sooner or later well defined, while the latter is diffuse and ill limited. The substance of the fibroma molluscum is made up of hypertrophied connective tissue, often well mixed with fat, and sometimes containing what Prof. Verneuil calls "associate eléments," viz:—bony, nervous and glandular substance.

It is a slowly growing tissue, but little vascular, and, if cystic, ordinarily contains a yellow, albuminous fluid. Generally mobile, surrounded by lax tissue, the tumors seldom attain to any great size, and are oftener multiple than unique; they adapt themselves, as to their form, to the region in which they grow, and some beginning as sessile tumors, may afterwards, by bulging out, become pedunculated, and hang from the body by a slight ropelike pedicle. An excellent photograph of a molluscum (pendulum) hanging from the upper part of the thigh, may be seen in the first volume of the "Revue Photographique des Hopitaux de Paris," p. 61. Another remarkable example of a molluscum pendulum of the foot, is represented in the December number of 1872. From the disposition to ulcerate, which both these tumors showed at parts unevenly compressed, it may be well supposed that they were poorly supplied with blood vessels. A congenital sessile molluscum (like the tumor of our patient, except that it is not cystic) of the upper part of the thigh, near the buttock, is photographed in the July number, of the same year. The August number of 1873, photographs a congenital tumor enveloping the left leg, which has all the appearance of an enormous sessile molluscum. Sex has no influence on the production of these tumors; the congenital cystic variety is very rarely found in the limbs. In an article on congenital tumors by Mr. Holmes in "The Surgical Treatment of Children's Diseases," the author refers to a paper published by Mr. T. Smith, in the 2d volume of St. Bartholemew's Hospital Reports, where he "points out the fact, that there is, as yet, no known instance of a congenital cystic tumor on any of the limbs." The tumor which is the subject of this paper, is, then, a very rare specimen, on account of its situation. In reference to the name given these tumors, Rindfleisch remarks: "If, therefore, the word molluscum be derived from mollis (and this hardly admits of doubt), no fitter name could possibly be found, inasmuch as softness is, throughout the entire life of these tumors, their chief characteristic." (Pathological Histology, vol. I, p. 374, Ed. Sydenham).

Surgery.

Stricture of the Urethra by the Electrical Treatment.

BY A. J. STEELE, M. D.

The attention of the profession has been of late especially called, and very justly, to a comparatively new method of treating strictures of the urethra, namely, by the use of galvanism. The ease of the appplication, the slight inconvenience to the patient, and the rapidity and permanence of the cure, make it really deserving of a prominent place among the surgical advances of the day. As my own experience corroborates the favorable reports that have been made in regard to it, I cheerfully add testimony in its favor.

The form of electricity used is that of the continuous current, and tension is sought rather than quantity, so that many small cups are demanded rather than a few large ones. I have usually found that from ten to fourteen pairs of the zinc-carbon elements have generated sufficient electricity for the purpose. The negative electrode is a metallic point pressed gently against the stricture; the positive electrode a moist sponge placed anywhere upon the surface of the body, though I have believed the action to be more energetic when it has been placed near the negative pole, as to the iliac region or thigh, rather than remotely, as to the leg or palm of the hand.

A metallic oval tip, connected to a wire passing through a gum catheter, is the form of bougie recommended, and which I have used, but I now prefer the ordinary conical steel bougie. A set, including all sizes, makes the convenience of application greater, and being silver or nickle-plated prevents oxidation. The instrument is insulated to within an inch of the point by the application of a coating of collodion; Squibbs' flexible, I find well adapted for the purpose.* A *sene-fine* affords an eligible method of connecting the wire to the handle—not coated—of the bougie.

Two factors enter into the thoroughness and rapidity with which a cure can be effected, viz., the electromotive

* Ether will dissolve it off when desired.

force used, and the character of the structure to be acted upon. The softer, the more moist and vascular the stricture, the more readily will it be decomposed and absorbed; whereas extremely hard tissue will demand increased time and greater tension, and possibly, also, increased quantity. Though in regard to the latter I am prepared to believe that mistakes have been made, and failures recorded, from its injudicious use. Quantity gives a calorific effect, with rapid destruction of tissue, as in the case of the galvanic cautery, the scar resulting therefrom would be highly prejudicial in the instance of a stricture. It is rather the electrolytic action that is desirable, whereby the organic structure is disintegrated, decomposed. The negative pole attracts hydrogen, and gives an alkaline re-action when acting upon moist animal tissues, chemically decomposing—dissolving the part, and doubtless, too, by its stimulant action, inducing absorption.

The situation and character of the stricture having been accurately determined, a bougie, prepared as above, and of a few sizes greater in caliber than the stricture, is introduced down to the obstruction and connected by its free end to the negative wire. The sponge, moistened with salt water, placed externally on the skin—the thigh or iliac region being convenient—is attached to the positive wire. It is best to commence with a single pair, and gradually increase the number of cups, as thereby the parts are more tolerant—a low power gradually benumbing, a high power unpleasantly shocking. If the sponge is shifted without being removed from the surface, the pricking or burning sensation ordinarily experienced will be lessened. The sensations of the patient will, to some extent, determine how high a power may be used; from ten to fourteen pairs, as before remarked, may be all-sufficient, if the battery is working well. The character of the stricture, also, necessarily enters into this question. A few moments' gentle pressure and the instrument is found to pass gradually on. Once well entered, the bougie is retained *in situ*, the action being continued for a few moments longer. The current may now be gradually diminished, and the wire disconnected, the instrument retained, and, if gentle force will accomplish it, pushed on into the bladder. If not interdicted by local inflammation, the operation may be repeated in a week or fortnight's time, followed up by the careful and judicious use of bougies. In some cases one application is sufficient; in others several seances are required, depending on the character of the stricture.

Results have been most satisfactory. Strictures, accompanied with incontinence of urine, gluty discharge, irritability of bladder, painful micturition, etc., being entirely removed and rapidly cured.

Danger in this operation is reduced to a shadow, if too great quantity and too prolonged application are avoided. Care, also, in the after use of bougies is to be regarded.

While there is much of merit in the old ways, let us not be too chary in trying the new.—*St. Louis Medical and Surgical Journal.*

DRAINAGE IN CHRONIC CYSTITIS.—Dr. Hunter McGuire reports a case of chronic inflammation of the bladder, of eight years' standing, in a woman æt. 41 years. He introduced a piece of fine gum tubing, perforated at the end, and allowed it to remain in the bladder for six weeks, it being withdrawn only for purposes of cleansing, or for the substitution of new pieces in place of the old. During this time the patient was kept in bed, and the urine collected in a urinal; but at the end of that time the free end of the tube was fastened to a gum bag which was attached to the patient's thigh. She wore the tube for about four months, constantly improving. When it was withdrawn, she had at first complete incontinence of urine, but the bladder gradually recovered its power, and a complete and permanent cure resulted.—*Virginia Medical Monthly*, April, 1874.

Institutes and Practice of Medicine.

Pathology of Insanity.*

BY JOHN P. GRAY, M. D.,
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On two former occasions I read before the society, papers on the physical nature and causation of insanity, and last year presented a few photo-micrographs illustrating some of the morbid changes, which, up to that

*Read before the New York State Medical Society, February, 1874. This paper embraces portions of one published in the January number of this Journal.

time had been discovered upon post-mortem examinations. With a single exception the illustrations were taken from chronic cases, for, although a large amount of material had already been prepared, the arrangements for successful representation by photo-micrography were not completed, nor until then had we been able to secure reliable, healthy brain tissue for comparison. Furthermore, up to that time we had been able to examine microscopically but one case of acute insanity, and in that instance only from the hardened brain.

Since the arrangements have been perfected in the pathological laboratory, we have obtained and examined healthy brain and nerve tissue, and also two more cases of acute insanity, and been able to make photographs from fresh as well as hardened tissue. In the portfolio here presented, are photo-micrographic illustrations of healthy brain tissue, acute, sub-acute and chronic mania, melancholia in acute and chronic stages, dementia, general paresis and epilepsy, and in connection with each, a descriptive text, presenting a brief history of each case. These investigations embrace the microscopic examination of 52 cases, and especially the changes found in the vessels, nerve fibres, cells and neuroglia or connective tissue.

As I have heretofore stated (see American Journal Insanity,) in all cases, the vessels, nerve cells and neuroglia undergo changes in their composition and arrangement before marked impairment of the conducting element of nerve fibre takes place. The increase of interstitial matter between the fundamental nerve elements, has been prominent, and while there has been a multiplication of connective fibres, there has been diminution of connective nuclei.

In chronic cases the increase of neuroglia, in the gray and white matter, has been characteristic, reaching a higher degree in the gray matter, and appearing more in the anterior than the posterior regions. The alteration has been found frequently in connection with the capillaries, more generally, however, in localized regions, in the cerebral tissue, circumscribed in a cystic cavity, formed by condensed, minute connective fibres. These isolated masses consist of a granular and friable matter, becoming transparent in the advanced stages, and in some cases even converted into a serosity. These granular products are not fatty, and are not dissolved by ether, chloroform or alkaline solutions. They become darker and more distinct when treated by acetic acid, and though remaining solid, do not exhibit a homogeneous mass.

The study of these developments would lead to the conclusion that they originate in the interstitial elements of the nerve tissue, and that, in their growth they produce, through mechanical pressure, reabsorption of nerve cells and fibres. The cavities in which they are contained vary in size from those of the nuclei of multipolar cells, to such as can be seen with the naked eye, constituting the pisiform excavations which give to the brain sections in cases of chronic insanity, the gruyere cheese appearance described by French alienists. Such cavities occasionally result from capillary hæmorrhages, then, however, the surrounding tissue shows discoloration,changing from yellow to a dark, rusty brown, from infiltration of coloring matter of blood. The cavities here described exhibit no such tint, nor are they in direct connection with the capillary vessels as the cysts proceeding from old appoplexies are. In this condition the brain elements disappear by reabsorption in scattered points, under a circumscribed necrobiosis originating from local conditions under the morbid process developed in the brain. Be this as it may, it seems evident that such isolated absences of tissue throughout the cerebral hemispheres, cannot be regarded as a consecutive effect of distant lesions. How much share these broken connections between the perceptive brain cells, and those of the peripheral part of the special senses take, in the causation of hallucinations and other sensorial phenomena, peculiar to insanity, is difficult to determine, although the fact appears worthy of notice in this special connection.

The alterations in the cerebral tissue, in general paresis, originates mainly in the vascular system, as has been shown by the researches of Virchow, Westphal, Salomon, Lockhart, Clark, Sankey and others, and to this origin must be ascribed the epileptiform symptoms so frequently attending general paresis, and deriving their source in local disturbances of the cerebral circulation. The change begins in the adventitious sheath of the arterioles and larger capillaries, first described by Virchow and Robin, which becomes distended in a small portion of its extent, sometimes uniformly around the minute vessel within, at others bulging out laterally, the enlargement thus produced being filled with lymph, granular cells and hæmatic crystals, or granulations, more generally the vessel is twisted or elongated, exhibiting a fine, fatty degeneration of its coats which are often torn assunder, allowing the blood to escape into the lymphatic surrounding sheath, where it coagulates and ultimately undergoes a fatty change.

The nervous elements in the vicinity of the blood vessels are also involved in their structure, and equally undergo an alteration characterized by a multiplication of connective fibres and molecular granulations. To such a proliferation of connective elements is due the peculiar firmness and pellucid appearance, with change of color, displayed in the gray substance, and which Baillairger (Annales) has described as one of the characteristic pathological changes of the brain in general paresis.

The condition of the brain in epileptic insanity, and especially the alterations in the medulla, agree in appearance and character with those pointed out and described by Dr. Echeverria in his work on epilepsy.

J. Hughlings Jackson defines epilepsy to be "an occasional, sudden, excessive and rapid discharge of gray matter of some part of the brain," thus constituting it a truly cerebral disease. We have been particular to examine cases of epilepsy, and though we have a large number of preparations, have not yet reached the point of much illustrative work, and consequently present but a few plates. In these, however, these morbid changes are very marked, especially the pigmentation of multipolar cells. It is highly important to determine whether the epileptic phenomena of convulsion and unconsciousness are simply in the nature of functional modification due to instability or increased susceptibility of brain tissue, or to some deeper change taking place in the vascular system and fundamental nerve elements. Whatever the initiatory processes may be, investigations show that in the progress of the disease there are profound degenerations, and that some form of insanity is likely to be superinduced sooner or later in the course of presistent epilepsy. Furthermore, the history of the disease shows the uncertainty and unreliability of the frequent actual arrest of the disease, by its return, even in the majority of the favorable cases, where a cure seemed to have been effected.

We have irritable nerve matter in nervous excitable people, and nervous exhaustion, as expressed in persons of high cerebral organization, by sudden failure of mental power and activity, and quick recuperation under rest; but these conditions are very different from the nervous explosions of epilepsy and the mental enfeeblement or degeneration so apt to follow continued epileptic seizures. If epilepsy, in the beginning, is simply loss of stability or malnutrition, its persistence, in so large a proportion of cases, would certainly justify the probability of a grave lesion at the foundation as the true *fons et origo*.

In fact, to say that disease is functional is simply to admit that we do not know what has taken place, or that we have only studied the phenomenal symptoms. The theory advanced by Hughlings Jackson, and indicated in his definition of epilepsy, that certain regions of the brain are so affected in epilepsy as not to hold, store up and give off as required, nerve force or energy in a normal way, but to discharge the whole suddenly and rapidly, and thus produce convulsive movements in those parts anatomically related to such a discharging center, in the brain, is perhaps the most satisfactory that has been presented. Assuming that the brain consists of many separate centers, each having a distinct relation through the motor tracts to the separate parts of the organism, this hypothesis would seem to account for the local as well as the general convulsive phenomena presented in this extraordinary disease. It still remains, however, to determine what relation the gray matter may have to motor action, and whether the disease, in its earlier or initial stage, is located in the medulla or gray matter of the brain.

The case of syphilitic insanity, of which several photomicographs are presented in the portfolio, adds further proof to the fatty degeneration which constitutional syphilis brings about in every tissue.

This is the only instance of syphilitic insanity of which we are able to present photo-micrographic representations. The insanity in this case was of an acute form, and the plates, while revealing such profound fatty degeneration, at the same time show, in a marked degree, the alterations characteristic of acute insanity. The history of this case in the beginning was one of typhoid fever, and the physicians giving the certificate for his admission to the asylum, (he was indicted for homicide) had hesitation in his case, and on his admission the mental phenomena of insanity were only slightly indicated. He died soon after and a post mortem examination revealed extensive inflammation of Peyers glands with ulceration.

The capillary system has participated in the morbid processes in every instance, but it has seemed to be affected primarily, particularly in general paresis and epilepsy. The nature of the alteration has been ultimately atrophic in every case, that is, resulting in the disappearance of central nerve elements, to wit: nerve cells and fibres, with a remarkable hyperplasia of amorphous matter and connective fibres. In acute cases the involvement of the fundamental elements in the

morbid process has appeared to have taken place rapidly, and without any observable effusion of lymph throughout the tissue. Such a morbid process cannot be looked upon as of an inflammatory character, for no proliferation of capillary vessels or the so-called inflammatory corpuscles of Bennett have occurred.

The trouble here has rather betrayed itself in a condition of intense irritation, exhausting the power of the cerebral cells and ultimately bringing on their consecutive necrobiosis. This assumption is perfectly consistent with the phenomena of restlessness and delirium, found in acute mania, and is furthermore strengthened by the discovery made by Brown-Sequard, that in cases of paralysis from injury, without irritation of the nervous centers, the consecutive alterations of nutrition are slow in their progress, while on the contrary, with irritation of the brain and cord, alterations of nutrition and structural changes supervene rapidly.

More than two years ago, Dr. E. R. Hun, in examining, in the Asylum, under the microscope, recent sections in the first case, acute under consideration, observed certain spots, the nature of which, however, we were not able to determine. Dr. Hun described this morbid appearance as follows: "While examining the brain of a female patient who died during an attack of sub acute mania, in August, 1871, I saw for the first time, a peculiar lesion of the tissue of the brain and spinal cord, which I subsequently met with in a number of cases, not only of acute mania, but also of other forms of insanity. These sections of the tissue, previously hardened in absolute alcohol, were made and colored with carmine, rendered transparent with benzole, and mounted in balsam. Examined by transmitted light, they could be seen with the naked eye, studded with small white spots, which were very numerous and of variable size. Under the microscope these spots presented a granular appearance, and many of them contained a number of elongated crystalline bodies. They did not imbibe the carmine solution to the same extent as the surrounding healthy tissue, and were of a pale greenish color. There edges were not well defined, but the deposit seemed gradually to merge into the normal brain substance. They were circular or oval in form, and varied in size from one-twentieth to less than five-hundreth of an inch in diameter. In some instances the nerve fibres seemed to pass through them, but as a general rule they seemed to be destroyed."

We now find that the spots are not colored by carmine at all. The sections then examined by Dr. Hun, were thick and what appeared to be a slight coloring by carmine, was due to coloring of brain tissue under and over the spots.

Dr. McKendrick, assistant to the physiological chair in the University of Edinburgh, found that within ten days after wounding the brain of pigeons, around the cicatrics, where they were healing, certain bodies appeared which, upon examination, were seen to be colloid. Batty Tuke says: "Colloid degeneration is one of the most important and interesting forms of brain lesion, being I believe the primary pathological change in certain of the most prominent and well defined varieties of insanity. I will merely say now that good reason exists for believing that upon colloid degeneration, depend those cases in which the vague term brain disease is employed to indicate that a primary affection of that organ is the exciting cause of the mental symptoms."

In the case of the pigeons, these colloid bodies would seem to be a hyperplasia, dependent on physiological activity in an abnormal degree, in the process of reparation.

The disturbance or arrest of functional action, or its increased activity in an organ morbidly affected, only in a circumscribed or limited space is already well recognized, and may be illustrated in cases of limited pneumonia, where the whole organ, however, suffers in its functional action. We see the same indeed in other organs, as the liver, kidneys, &c. Limited or regional disease of the brain and spinal cord, is also a well settled pathological fact, and in paralysis, epilepsy and trumatic injuries we have marked examples.

In hemiplegia, a lesion in the motor tract not only produces paralysis of the anatomically related muscles, but a temporary and partial paralysis of muscles not so related. Whether this latter is due to shock or physiological sympathy, it is not necessary here to discuss, I simply refer to the fact. In severe cases of hæmorrhage into the motor tract and consequent hemiplegia, there is also more or less mental shock, and even mental disturbance, showing a convolutional relation with the motor lesion. On the other hand, a hæmorrhage on the surface of the brain instantly affects the motor tracts.

The application of the theory of limited or regional lesions in insanity would seem to be not only in accordance with what we discover in other cerebral diseases, but is

sustained by the phenomena of the disease and by pathological investigations.

In a case of mania of but a few days standing, we discovered in the fresh specimens, when under the microscope, along the true inner wall of the capillary vessels, and between the wall and the delicate lining or intima, small granular masses in spots presenting so large an accumulation as to practically produce a thrombic condition of the vessel. In others producing an occlusion and practically an embolism.

These granular bodies are also collected near the branching of vessels. In another case of mania, where the disease was farther advanced, we have observed colloid bodies, a semitransparent nitrogenous plasma, proteinaceous in its nature, scattered through the tissue and not confined to the line of the vessels, sometimes so thickly spread out as to occupy nearly half the space over the section. The former would seem to be the earliest morbid product of the physiological change, initiating the subsequent cerebral pathological condition, thus sustaining the opinion of pathological observers that the change commences in the vascular system, and that the central nerve elements, the cells and neuroglia, are consecutively or sequently involved. This is sustained by the further observation that the amyloid bodies, a non nitrogenous product, which are observed in the more advanced conditions, and especially in chronic insanity, dementia and general paresis, are found also along the vessels in the location of the original granular bodies, these amyloid bodies being evidences of advanced degeneration, found not only in sections immediately after death, and in hardened brain tissue, but also developed in the brain after death when kept in moist and not over warm locations. The earlier granular bodies spoken of when they spread over a more or less extended region, limit the circulation in the vessel and by impeding it induces first, a local hyperæmia, and subsequently, by cutting off the supply of blood or largely embarassing it, a local anæmia; hence, we have nutrition not only impaired, but to a certain extent prevented, and the brain cells being thus deprived of blood, finally pass into conditions of fatty degeneration and necrobiosis. Again, in cells feebly nourished, or subjected to pressure of a mechanical nature arising from a proliferation or increase of connective tissue or neuroglia, there is embarassment of functions, at times amounting to actual suspension. This increase of neuroglia is found in all stages of the

disease. Indeed it will be observed that this increase of interstitial or amorphous matter has largely obliterated the nerve elements.

Some observers, and prominently Batty Tuke, probably judging from this general distribution or increase of interstitial matter, suggest the idea that the disease commences in the neucli of the neuroglia. The colloid bodies found so profusely in the early stages, and being in the nature of normal plasma, are quite probably material thrown out under increased functional activity as an attempt at a reparative process, just as we have plasma thrown out in œdema, or as in the provisional exudations which occur preparatory to the reparative processes in lesion of various parts of the organism.

If the earlier granulations in the walls of the vessels and the materials thrown out are reabsorbed, (a process of reabsorption we know to be reparative in other organs as in pneumonia, congestion of the lungs, glandular swellings, erysipelatous œdema, &c.,) recovery takes place, if not, as before stated, the death of the tissue follows from malnutrition, or partial or complete deprivation of nourishment from pressure, &c., and the portion of the brain involved passes into a permanent condition of disease from transformation, by degenerative processes, into fat and interstitial amorphous matter.

As previously stated, the higher elements as the nerve fibres and cells, are the last to give way. They often preserve their vitality, however, under a low degree of nutritive action, and when the slow absorption of material releases them from pressure, we have recovery in chronic cases.

A fact which seems of the utmost importance is the similarity of histological changes attending the different forms of insanity. If such regularity is displayed in future investigations, as I am strongly led to believe will be the case, this fact will practically confirm the principle, that in insanity we have to contend with only one diathesis, manifesting itself under different phases in its progress and results. The correspondence between degenerations of the cortical substance and of the central ganglia, pointed out in France by Luys, Laborde and Charcot, and in this country by Echeverria, has found further confirmation in these researches; whereas, lesions in the structure of the third left convolution, as Bouchard, Echeverria, Batty Tuke and others, have already shown, have not necessarily involved the existence of aphasia or amnesia. The importance

attached to this subject has led me in every instance to direct investigation particularly to this region of the brain. I simply state here the result, hoping to treat this question at some future time, when the material may be sufficiently abundant to determine the exact value of the ingenious theory so confidently put forth by Broca.

The distinction between the appearance of the cerebral tissues, in the specimens presented, of mania and those of general paresis and epileptic insanity, would seem to uphold the separate class assigned to the last two forms of disease in the classification adopted.

Although the cases thus far examined may be regarded as insufficient to establish general conclusions, they go to strengthen the conviction sustained by the laws of general pathology, that insanity is a physical disease of the brain, and that the mental phenomena are symptoms. Further, that the microscope with patient and close investigation, will continue to disclose structural changes in the cerebral tissue, as marked as those heretofore unsuspected, when examinations were limited to the scalpel and naked eye; and in these investigations, when the entire range of the disease, in every stage of its progress, shall have been brought under the microscope, we may be able to solve the problem of the morbid processes conveniently denominated as insanity.

Another conclusion to which these investigations would naturally lead, is, that the variety and changes in the predominant symptoms of insanity, may find their explanation, not so much in the variety of lesions, as in the special parts of the cerebral centres, which are morbidly involved in each case; or, to bring the idea within narrower limits, that emotional, ideational and motor disturbances have their foundation in the extent and degree, to which the nerve elements that minister to the execution of intellectual and motor acts, are involved in the lesion. When the disease reaches its ultimate stage, all distinctions cease, dementia being the same closing stage of every so-called form of insanity.

The bodies or cells are the so-called granule cells of the German authors,* a peculiar fatty cell formation, which,

*Theod. Simon: Archiv fur Psychiatrie Bd. 1 Heft. 3, Bd. 2 Heft. 1 and 2.
Theod. Simon: Die Gehirnerweichung der Jerren (Dementia paralytica,) Hamburg: Wilh Manke.
L. Meyer: Archiv fur Psychiatrie Bd. 3, Heft. 1 and 2.
Huguenin: Archiv fur Psychiatrie Bd. 3, Heft. 3.
Obermeier: Archiv fur Psychiatrie Bd. 4, Heft. 1.
Tigges: Allgemeine Zeitscherift fur Psychiatrie Bd. 29, Heft, 2.
Rabenau: Archiv fur Psychiatrie Bd. 4, Heft. 2.

first observed in the spinal cord, for a time were considered as a pathological change, especially relating to general paresis (progressive paralysis). After more extended investigations, however, embracing over three hundred cases, only a part of which were accompanied by the symptoms of paresis (paralytic dementia), and after discovering the same lesions in acute as well as in chronic cases, and in all regions of the nervous centres, the theory gained ground, that these transformations of the tissue elements into granule cells were general phenomena, produced by a general or local disturbance of nutrition.

The extent to which they appear is undoubtedly in all instances of the greatest importance. They have been found as a component part of senescence, but also in the cord of children, only a few months old.

Their relation to inflammation of the spinal marrow has led authors to distinguish between simple myelitis and myelitis connected with a formation of granule cells; the last, without regard to paralytic dementia (paresis) and frequently connected with phthisis and in cases of chronic mania and melancholia of long standing, and especially in cases of senile dementia (Simon) accompanied by paralytic symptoms. The affection of the dura and pia spinalis, known as chronic spinal meningitis found in connection with phthisis, as first pointed out by Simon, may lead to a closer study of the symptoms of the so-called granule cell myelitis, without being complicated with affections of the nervous centres.

In gray degeneration, Turk,* distinguishes between a gray degeneration without, with only a small and with an extensive occurrence of granule cells, and maintains no necessary connection between these two lesions. Theod. Simon asserts with great positiveness that the granule cells myelitis can not be regarded as its beginning state, and that it may produce itself the most marked symptoms of paralysis, without undergoing a metamorphosis into gray degeneration.

The former assumption (Turk) that the whole process of transformation of tissue elements into granule cells is only to be regarded as a slowly progressive one could likewise not be ascertained. On the contrary, in all those cases, where they undoubtedly proved fatal, the changes occurred most rapidly, as in fatty matamorphosis in general.

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*Turk: Wiener Academie Berichte Juni 1866.

In a case of embolism of one of the larger cerebral arteries of only three day's duration, the smaller vessels and capillaries wers found extensively involved by accumulations of these cells. Similar very acute cases have been observed by Voisin,* by Huguenin,† and as above shown in plates, and these latter have presented an excellent occasion for the study in detail of the development of granule-cells.

The drawings and the description given by Voisin are, however, lacking in correctness and distinction, while those of Huguenin could only in most of the principal parts be confirmed by our own investigations, before we had the opportunity of noticing the same.

1. The oblong nuclei of the fusiform cells of the capillaries are transformed into granule-cells.

Of the cell-elements of the vascular system the nuclei of the smallest capillaries seem in all cases first affected. The nucleus looses its smooth, shining appearance, swells up, beginning at the outer border, first to an oviform, sometimes irregular shaped granular body, in which often two or three small spherical nucleoli are distinguished. In a little further advanced stages two or three of these bodies formed by division of the first one, fill up nearly the whole space of the mother cell, distending its membrane, which soon entirely disappears, and rows on each side of six, eight or more, dark granulated globules, here and there showing between them the remains of an unaltered cell, mark the course of the former capillary duct.

2. The nuclei of the cells of the adventitia of the capillaries are transformed into granule-cells.

These transformations of the fine and delicate involucrum which surrounds the larger capillaries of the nervous centers exhibit somewhat different features from those above described. An accumulation of a grumous granular matter first takes place around the nuclei. The nucleus entirely involved by these granules disappears, and a granule-cell, sometimes of considerable size, is formed. What part the nucleus takes, however, in the process of multiplication of these cells, has not yet been determined. But soon they appear multiplied by division, and the new accumulations form in the most advanced stages large oval masses of granule-cells, which involve entirely the unaltered, though apparently compressed inner space of the capillary vessel. Some of these exhibit, soon after reaching this state, an

*Voisin: Association Francaise. Bordeaux, 1872.
†Archiv fur Psychiatrie, Bd. 3, Heft. 3.

atheromatous condition; the outlines of the cells become indistinct and a crystalline fatty mass is formed.

3. The lymphatic elements of the adventitia of the vessels are transformed into granule-cells.

These belong to the most common and most extensive ones. The formation of the cells occur in the same manner as in the adventitious elements of the capillaries, by accumulation of granular bodies which multiply by division.

4. The nuclei of the muscular coat of the vessels are transformed into granule-cells.

The history of these transformations has recently been brought within our observation in a case of melancholia connected with phthisis. According to Huguenin, in an acute case, after removing the degenerated adventitious parts, the outlines of the muscular fibres disappear, the transversely situated nuclei are enlarged, become opaque and of a grumous and granular structure, while the whole vessel itself perishes.

5. The nuclei of the neuroglia are transformed into granule-cells.

The nuclei are enlarged, the protoplasm appears contracted, opaque and of a darker color than usual. In further advanced stages it is divided into two, three or more granular conglomerations, which afterwards separate, forming as many single globules.

6. The spindle-shaped ganglion-cells of the inner layer of the cortes of the convolutions, and the larger pyramidal cells are transformed into granule-cells.

The process in the transformation of the smaller ganglion-cells is much like that of the nuclei of the neuroglia. The pyramidal-cells appear first as puffed out, the protoplasm is formed into vesicles, like small oil globules, surrounding the nuclei. The nucleus looses its fine punctured appearance, and seems divided by the contraction of its contents into a translucent part, which often contains the opaque looking nucleolus and into a grumous mass filling out the other half. In further advanced stages the whole nucleus seems to form one large-sized granule-cell, sometimes with irregular outlines, the outer part of the cell and the processes are then shrivelled.

In all instances, as will be seen, a necrotic decay of the elements is the general feature of these changes, apparently produced by a sudden and continued lack of nutrition. The principally affected regions are always softened, often intermingled with lymphatic elements, which, very

probably, play an important role in the propagation of these lesions.—*American Journal of Insanity.*

ANTIDOTE OF RABIES.—Dr. Jitzki communicated, in January, 1874, to the Imperial Society of Wilna (Russia), a fact of some interest. A very savage dog was in the habit of killing vipers (*Coluber berus*), and his mouth and neck were covered with wounds inflicted by the vipers. This animal was bitten by a mad dog which had already bitten several horned cattle and a dog; these all perished in a rabid state. The owner of the first-mentioned dog, not wishing to destroy him, determined, however, to watch him, and made up his mind to kill the poor animal at the first symptom of rabies. Nothing, however, happened, and the dog remained quite well.

This case struck Dr. Jitzki, especially as he learned that a woman of the same locality had been bitten by a viper and sometime afterwards by a mad dog without suffering from hydrophobia. He was thus led to suspect that there is antagonism between the virus of hydrophobia and the virus of vipers. If this were true, young dogs might be inoculated with the latter virus, and thus be made insusceptible to hydrophobia.—*The Lancet,* June 6th, 1874.—*Philadelphia Medical Times.*

A VERY active preparation of ergot, which is particularly adapted for subcutaneous injection, is suggested by Dr. Wernich, of Berlin (*American Journal of Pharmacy*, July 1, 1874), who proposes to exhaust the ergot with ether, strong alcohol, and finally with water; the infusion is then dialyzed through parchment-paper, and the solution evaporated; this extract, after acidulation with sulphuric acid, was mostly soluble in alcohol, and when again carefully neutralized by soda, yielded to weak alcohol all its active properties. Subcutaneously injected, the author obtained good results promtply, and the inconveniences attending the hypodermic use were slight and disappeared rapidly.—*Apotheker Zeitung,* 1874, No. 17. — *Philadelphia Medical Times.*

BEAUTY makes virtues smile and vices blush.

Gynecology and Diseases of Children.

Hydro-chloral by the Rectum in the Vomiting of Pregnancy.

Dr. D. B. Simmons gives the history of four cases in which this remedy was successfully employed. The first case may be taken as a type of the others.

"CASE 1. Patient aged 30; third child. The vomiting became excessive during the third week of pregnancy, and continued until the tenth week, when I saw her. For several days before it had been almost constant, both by day and night. She was very much emaciated and unable to sit up, even in bed, not having retained any nourishment for several days. All the usual remedies had been tried, such as the oxalate of cerium, hydro-cyanic acid, hypodermic injections of morphine, etc., but with little benefit.

"I suggested the administration by the rectum, morning and evening, of thirty grains of hydro-chloral, in mucilage, to be increased in quantity if there was no improvement, or if the specific effect of the medicine was not too decided. An amelioration of the symptoms was obtained by the first injection, and the result of the second was still more satisfactory. The second day's use of the remedy arrested the vomiting, except at long intervals, and on the third day both nausea and vomiting ceased entirely. There was no return of the symptoms. Some nourishment was taken and retained even on the second day. From this time the patient rapidly gained strength, and was delivered of a healthy child at term.

"Should another opportunity offer, I have decided to commence with larger doses, being convinced that a decided impression produced by the medicine at first will require its repetition but two or three times to put an end to this troublesome symptom, for the time at least."—*The Medical Record*, June.

Hydrate of Chloral in Puerperal Eclampsia.

Dr. Bourdon (*Lo Sperimentale, Fascicolo nono*, 1873), having a case of eclampsia in a woman aged 21 years, determined to try the effects of hydrate of chloral. The patient had arrived at the termination of her first pregnancy, and for the last fifteen days had suffered from œdema of her

lower limbs and eyelids, cephalalgia, somnolence, and a large quantity of albumen in the urine, when she suddenly fell into a violent convulsion, which lasted for ten minutes. As soon as the attack passed off, M. Bourdon administered an injection per anum of 60 grains of hydrate of chloral; this induced immediate sleep. On the following morning, to prevent any recurrence of the attack, two more injections were prepared with 60 grains of chloral in each. The first was administered at 10 A. M., notwithstanding that delivery had commenced. Two hours after a second was given, and at 3 P. M. delivery was completed without consciousness on the part of the patient. In the evening, about 8 P. M., a fresh convulsion occurred, for which a draught of 60 grains of chloral was again given. She fell into a sound sleep, and the subsequent recovery took place without anything remarkable.—*Practitioner*, February, 1874.

Meningitis Tuberculosa.

J. A. Waldenstrom, of Upsala, gives, (*Deutsche Klinik*, 1873, No. 29,) as the two characteristic symptoms to aid in the diagnosis of this disease in early infancy, the vomiting, and the condition of the fontanella. When the former occurs after awakening or during sleep and after change of position, from lying to sitting, or the reverse, especially shortly after eating, abdominal difficulties being at the same time excluded, it can generally be considered as due to irritation of the great nervous centres and affords a suspicion of tuberculous meningitis.

The other principal aid to the diagnosis in very young infants, the protrusion of the fontanella, is due to the intracranial pressure from the effusion into the ventricles. This symptom, which is generally overlooked by the text books, has been constant in all the cases observed by the author, though not always equally easy of detection.

In one case where chronic catarrh of the stomach and bowels, with vomiting and diarrhœa co-existed, he diagnosed the disease by this symptom alone, and though doubted by his colleagues of the Poliklinik, the correctness of his judgment was verified by the autopsy.

The diagnosis without these symptoms may be sufficiently easy to the skilled practitioner, but those less accustomed to diseases of children, will find them useful, especially so as they occur at a period when no knowledge

of his or her subjective sensations can be obtained from the little patient.

Removal of Both Ovaries.

Mr. C. G. Wheelhouse, Surgeon to the General Infirmary at Leeds, reports (*British Medical Journal*, March 21, 1874) it has once fallen to his lot, on removing an ovary in the case of a young lady aged 19, to find that the other one was also in a state of incipient disease. This he removed at the same time, and thus perfectly unsexed his patient.

"It is three years ago this month since the operation was performed, and I have watched the case ever since with the greatest anxiety. There has never been any attempt at menstruation, nor has any vicarious discharge ever taken the place of the natural one ; but, beyond this, I see so change of any kind. The general health is now as perfect as it ever was, and, so far from any uncomfortable symptoms of masculinity having occurred, the voice remains as soft, the bust as full, and the whole aspect and demeanor are as perfectly feminine as in any other young lady of my acquaintance."—*Medical News and Library.*

Mechanical Contraction of the Uterus.—Sir James Simpson used to mention a custom among some savage tribes, where, on the approach of labor, a stake was driven into the ground, and a long rope attached to it; the distal end of this rope was wound around the patient's body, and she herself gradually turned round so as to be brought nearer to the stake as the labor progressed, thus insuring an efficient following-up of the uterus upon the descending child, thereby preventing post-partum hemorrhage.—*British Medical Journal.*

Sanitary Notes.—The whole science of Hygiene may be included in the one word Cleanliness. The removal of refuse of all kinds, solid, liquid and gaseous, is embraced within it, and pure air and water become a necessary result of the operation. It is a trite saying, "Nature abhors a vacuum," or, more correctly, Nature always *supplies* a vacuum.

Public Health and Vital Statistics.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during June, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	343	45	26	48	0	16	6	S. F. B'd of Health.
Sacramento	24	5	0	3	0	0	1	Sac. B'd of Health.
Petaluma	3	2	0	0	0	0	0	Dr. G. W. Graves.
Dixon	1	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	9	0	0	1	0	6	0	Stockton B'd Health.
Marysville	4	1	0	1	0	0	0	Dr. A. B. Caldwell.
Placerville	0	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	3	1	0	0	0	0	0	Dr. T. C. Stockton.
Oroville	...	..	..	..	..	..	.	Dr. J. M. Vance.
Los Angeles	34	4	1	3	0	0	1	Dr. H. S. Orme.
Truckee	2	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	3	0	0	1	0	0	0	Dr. C. F. A. Nichell.
Napa City	3	0	0	1	0	0	0	Dr. M. B. Pond.
Watsonville	2	1	0	0	0	0	1	Dr. W. W. Ross.
Folsom	0	0	0	0	0	0	0	Dr. S. Lyons.
Santa Cruz	...	..	..	..	..	..	.	Dr. C. L. Anderson.
Suisun, Fairfield	3	0	0	1	0	0	0	Dr. S. D. Campbell.
Colusa	5	0	0	1	0	0	0	Dr. Luke Robinson.
Trinity County	...	..	..	..	..	..	.	Dr. J. C. Montague.
Santa Barbara	7	2	1	0	0	0	0	Dr. C. B. Bates.
Redwood City	4	1	0	0	0	0	0	Dr. C. A. Kirkpatrick.
San Andreas	...	..	..	..	..	..	.	Dr. C. B. Robertson.
Auburn	7	1	0	0	0	0	0	Dr. A. S. Dubois.
Tulare County	...	..	..	..	..	..	.	Dr. M. Baker.
Siskiyou County	1	0	0	1	0	0	0	Dr. Daniel Ream.
Susanville	1	0	0	1	0	0	0	Dr. J. J. Sawyer.
Downieville	1	0	0	1	0	0	0	Dr. Alemby Jump.
Healdsburg	0	0	0	0	0	0	0	Dr. J. Bradford Cox.
Shasta Co	3	0	0	0	0	0	1	County Recorder.
Michigan Bluffs	1	0	0	0	0	0	0	Dr. J. L. Jackson.
Pajaro	1	0	1	0	0	0	0	Dr. Nichols.
Sierra City	0	0	0	0	0	0	0	Dr. L. F. Jones.

Remarks.—Our table reveals the not unusual increase of mortality, with the advance of Summer in San Francisco, and Monterey. In the former place, the increase is more than 20 per cent. that of May, and appears to be chiefly

by very young children—there being 18 deaths from cholera infantum. It is impossible to discover the cause of the great mortality in Los Angeles, on account of the imperfection of the returns. Our attentive correspondent complains that the Registration laws are not generally regarded. There should be a local Board of Health established, not only here, but in all our cities and towns, in accordance with Article V., Section 3,059 of the Political Code. Contrary to rule, the mortality in Stockton and Marysville has declined one-half. In the former locality we have but 6 deaths from Scarlatina, against 9 in the preceding month. Among a population of about 1,500 in an area of 18 square miles, Dr. Jones, of Sierra City, reports 59 cases of sickness and no deaths during June. Dr. Nichell reports 3 deaths out of 82 cases treated in his locality; and Dr. Jump 7 cases of sickness, and no deaths in his practice, extending over an area of 10 square miles, and embracing a population of about 1500. These facts speak well for the healthfulness of the State at this season.

THOMAS M. LOGAN, M. D.,
Permanent Secretary State Board Health.

Board of Health.

The monthly meeting of the Board of Health was held yesterday, Mayor Otis presiding.

Dr. W. W. Lawlor, Resident Physician of the City and County Hospital, submitted his annual report as follows: Patients remaining in Hospital July 1st, 1874, 303; patients admitted, 3,244; total to be accounted for, 3,547; patients discharged cured, 1,968; discharged by their own request, 892; died, 275; sent to the Insane Asylum, 16; sent to the Alms House, 59; remaining July 1st, 1874, 337—3,547; average number of patients, 366; number of outside treatments, 11,201; children born—males, 21; females, 11; total, 32. According to sex and color, those admitted during the year are divided as follows: Males, white, 2,776; black, 54; yellow, 8; total, 2,838. Females, white, 400; black, 6; total, 406.

A NEW WARD NEEDED.

The Visiting Physician reported that several of the wards in the hospital were overcrowded, and recommended the building of an additional ward. A resolution was adopted, requesting the Supervisors to attend to the matter.

THE NORTH BEACH NUISANCE.

The much-complained-of nuisance at North Beach was brought up, and after some discussion a resolution was adopted, recommending to the Supervisors that the Mason-street sewer be extended into the bay, and that the Taylor-street sewer be continued from Francisco street to the bay.

Mr. Cragin, Clerk of the Mayor, was elected Clerk of the Board of Health.

After the transaction of some other unimportant business the Board adjourned.—*Alta.*

Report of the Coroner of the City and County of San Francisco—J. R. Rice, M. D.

FROM JULY 1ST, 1873, TO JUNE 30TH, 1874, INCLUSIVE.

	Accident	Alcoholism	Natural Causes	Murder	Manslaughter	Justifiable Homicide	Suicide	Unknown Causes	Still-born	Totals
Alcoholism	....	10	....	....	....	....	....	....	....	10
Burning	4	....	....	....	....	....	....	....	....	4
Blow on the head or body	3	....	....	....	2	1	....	....	....	6
Crushed	10	....	....	....	....	....	....	....	....	10
Cutting	2	....	....	....	....	....	....	....	....	2
Drowning	21	....	....	....	....	....	1	8	....	30
Explosion	3	....	....	....	....	....	....	....	....	3
Falls	14	....	....	....	....	....	....	....	....	14
Hanging	....	....	....	....	....	....	5	....	....	5
Infanticide	....	....	....	1	....	....	....	....	....	1
Natural Causes	....	....	116	....	....	....	....	....	....	116
Pistol Shot	2	....	....	7	....	1	31	....	....	41
Poison	3	....	....	....	1	....	9	....	....	13
Run over by truck or car	4	....	....	....	1	....	....	....	....	5
Strangulation	....	....	....	1	....	....	1	....	....	2
Suffocation	2	....	....	....	....	....	....	....	....	2
Stabbing and Cutting	....	....	....	8	1	1	1	....	....	11
Still-born	....	....	....	....	....	....	....	....	9	9
Throat Cut	....	....	....	2	....	....	11	....	....	13
Unknown Causes	....	....	....	....	....	....	....	3	....	3
Totals	68	10	116	19	5	3	59	11	9	300

Monthly Report of Deaths Registered in San Francisco during August, 1874.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	3	....	....	...	2	1	..	2	1	....	....	1	2
Measles	....	....	....	....	....	....	..	...	....	...	....	....	....
Scarlatina	20	...	13	7	....	....	..	7	13	18	2	....	....
Diphtheria	3	....	3	....	....	....	..	1	2	3	....	....	....
Croup	1	....	1	....	....	....	..	....	1	1	....	....	....
Whooping Cough	....	....	....	....	....	....	..	....	....	....	....	....	....
Typhus and Typhoid Fevers	17	....	....	8	9	....	..	8	9	4	4	....	9
Diarrhœa and Dysentery	5	....	3	....	1	1	..	3	2	2	1	....	2
Cholera Infantum	14	....	14	....	....	....	..	6	8	14	....	....	....
Cholera Morbus	2	....	....	....	1	1	..	1	1	....	....	....	2
Pyemia and Septicemia	2	....	....	....	2	....	..	1	1	....	2	....	....
Cerebro-Spinal Meningitis	2	....	2	....	....	....	..	1	1	2	....	....	....
Syphilis	2	....	....	....	2	....	..	....	2	....	....	2	....
Alcoholism	2	....	....	....	2	....	..	2	....	....	....	....	2
2—Cancer	11	....	1	....	6	3	1	3	8	1	2	2	6
Phthisis Pulmonalis	33	....	....	2	27	4	..	26	7	4	8	1	20
Hydrocephalus & Tubercular Meningitis	2	....	2	....	....	....	..	2	....	1	1	....	....
3—Encephalitis	15	....	9	3	1	2	..	11	4	10	2	....	3
Apoplexy and Paralysis	6	....	....	....	1	3	2	5	1	....	1	....	5
Convulsions	14	....	13	1	...	....	..	6	8	14	....	...	....
Other Diseases of the Nervous System	5	....	3	....	2		..	3	2	3	1	....	1
Aneurism	5	....	....	....	5	....	..	4	1	...	....	....	5
Diseases of the Heart	19	....	....	1	11	5	2	8	11	....	5	....	14
Pneumonia	16	....	5	3	4	3	1	7	9	8	1	....	7
Bronchitis	5	....	3	....	2	....	..	4	1	2	3	....	....
Other Diseases of the Respiratory Organs	7	....	1	1	4	1	..	4	3	1	....	1	5
Diseases of the Stomach and Bowels	10	....	4	....	1	5	..	9	1	4	2	....	4
Diseases of the Liver	7	....	....	....	5	2	..	5	2	....	2	....	5
Bright's Disease and Nephritis	....	....	....	....	....	....	..	....	....	....	....	....	....
4—Puerperal Diseases	4	....	....	....	4	....	..	....	4	....	....	....	4
Atrophy and Inanition and Old Age	33	....	25	....	2	3	3	14	19	24	5	....	4
5—Suicides	4	....	...	....	3	1	..	3	1	....	2	....	2
Deaths in Institutions	68	....	4	3	42	16	3	50	18	7	11	2	48
Still-Births	....	....	....	....	....	....	..	14	9	....	....	....	....
1—Zymotic Diseases	81	24.2	37	15	25	4	..	39	42	45	12	3	21
2—Constitutional Diseases	50	15.0	5	4	33	7	1	34	16	10	11	3	26
3—Local Diseases	125	37.1	40	9	45	25	6	74	51	45	18	3	57
4—Developmental Diseases	43	12.9	31	....	6	3	3	15	28	30	5	....	8
5—Deaths from Violence	16	4.8	....	1	10	4	1	13	3	....	4	....	12
Deaths from Unknown Causes: Chinese	19	5.7	1	....	18	....	..	18	1	1	....	18	....
Deaths from Unknown Causes: Others	....	.....	....	....	...	....	..	....	....	....	....	....	....
Total	334	.....	114	29	137	43	11	193	171	131	50	27	126
Per Cent. to Total Mortality	....	100.00	34.1	8.7	41.0	12.9	3.13	57.8	42.2	39.2	15.0	8.1	37.7

HENRY GIBBONS, Jr., M. D.,
Health Officer.

The French Mutual Benevolent Association.

STATISTICS OF PATIENTS FROM MAY 1ST TO JULY 31ST, 1874.

Visiting Physicians: Dr. Tigne Dupuytren and Dr. D'Oliveira.

Consulting Physician: Dr. B. Hoffstetter.

Patients under treatment the 1st of May, 1874, 66; admitted from May 1st to July 31st, 1874, 210. Total, 276.

Of this number: Patients cured or convalescent, 211; dead, 14; under treatment on the 31st of July, 1874, 51. Total, 276. Average number of patients treated daily, 63.

Causes of death—Asthma, 3; phthisis, 4; typhoid fever, 1; apoplexy, 1; erysipelas, 1; syphilis—ulceration of throat, 1; perforation of the stomach, 1; myelitis, 1; general rheumatism, 1. Total, 14.

In this institution all physicians are allowed to attend the patients they may send to the Hospital.

Hospitals and Hospital Construction.

BY JOHN M. WOODWORTH, M. D.,
Supervising Surgeon United States Marine Hospital Service.

Though the following is but an outline of the subject of the above title, sketched amid the pressure of official duties, and the details of a service extending from the Atlantic to the Pacific, and from the Great Lakes to the Gulf, it is offered in the belief that the adoption of the pavilion hospital plan, alluded to in the pages of the preceding report*—and which marks the inauguration of a new era in hospital construction, at least so far as the Marine Hospital Service is concerned—renders necessary an explanation of the details of the plan adopted, and, incidentally, some consideration of the principles which, it is conceived, should govern hospitals, their design, location, material, general arrangement, duration of use, etc.

* Report of the Supervising Surgeon U. S. Marine Hospital Service, 1873.

Hospitals are established, primarily, to facilitate the recovery of the sick and disabled. But while this is the first and fundamental principle, to the enforcement of which all others should be subservient, the essential reason for the existence of a hospital, as such, is the aggregation of patients under such conditions as that a relatively small number of medical attendants and nurses may suffice for their treatment and care.

With this aggregation of patients, however, come certain evils, which, if not met and counteracted in the mode of construction and in the general arrangement of the hospital, frustrate the primary object, and even become the cause of other and graver disease, and of a consequent increased percentage of mortality.

What these evils are will be described more fully in the context; but it may be here remarked that it so happens that the most economical mode of hospital construction is really safest for the sick. When this fact comes to be as clearly recognized by the profession generally, as it is now by a few close observers of hospital practice, the old magnificent hospitals, built as "monuments for all time," will be abandoned for the simple pavilion, of indefinite existence; and the only strictly permanent parts of the modern hospital, constructed on wise sanitary principles, will be the executive building, kitchen, laundry, and engine house. For although we are accustomed to regard the hospital as an asylum designed for the benefit of the sick, yet it not unfrequently occurs that patients enter great general hospitals with simple diseases or trivial injuries, and contract therein other maladies of a more serious character, of which, indeed, they often die. What is true of the large general hospitals referred to, is unfortunately true of every marine hospital now in use, the new Chicago Marine Hospital* alone excepted.

EVILS OF BADLY CONSTRUCTED HOSPITALS.

The causes which render a badly constructed hospital unhealthful are due to those natural influences which are continually at work in the body, suffering from disease, to restore it to the normal condition of health. The lungs

* Like all the work of Mr. MULLETT, it is thoroughly honest and complete, and it is certainly no reflection upon his professional ability, to say that the chief blemish of the Chicago hospital, in the eye of the modern hospital surgeon, is the architectural merit in its promise of solid endurance and permanence. But while thus showing his preeminent ability in dealing with the old standards, Mr. MULLETT has been equally prompt to recognize and respond to the requirements of the new; and the writer desires here to acknowledge his indebtedness for the ready and intelligent interest with which his suggestions in regard to wooden pavilion hospitals have been met by the Supervising Architect.

and skin are two great channels through which constantly escape from the system, even in health, the most deleterious or poisonous elements. In disease these emanations become more actively, and even specifically, poisonous; hence a number of patients congregated in a common ward, generate a miasm which accumulates, if not rapidly removed by adequate ventilation, until every part of the room is pervaded, and after a longer or shorter period, depending upon the persistency and degree of cumulation, the floor, walls, furniture, and bedding of the ward become saturated with a miasm which is capable of poisoning a large percentage of those who are exposed to its influence.

The phases of hospital disease produced by hospital miasm vary under different conditions of the victims exposed to it. Thus, one is attacked with erysipelas, another with pyæmia, or with gangrene, or with puerperal fever, etc. While wounded or suppurating surfaces appear to furnish the conditions most favorable to the reception and activity of the poison, it cannot be doubted that most diseases are aggravated by its influence, although the patients may not show the characteristic evidences of it.

The record of pyæmia and erysipelas in Bellevue Hospital, of New York, strongly exemplifies the influence of an old building on hospital patients. The results of an examination into the relative prevalence of these diseases in that hospital during the year 1871, as compared with former years, furnish the following tables, as given in *The Medical Record* of September 1, 1872:

Table No. 1 shows the absolute frequency (as nearly as is attainable) of erysipelas and pyæmia from 1861 to 1871, inclusive, and their relative frequency in the several years, as compared with one another in the same year:

TABLE NO. 1.

Years.	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	Total.
Erysipelas	61	51	109	100	88	87	30	52	97	76	100	851
Pyæmia	20		10	11	10	5	14	33	14	37	39	193

Table No. 2 shows the relative frequency of occurrence of erysipelas and pyæmia during the different months of the year, deduced from the records of the hospital for the time mentioned:

TABLE No. 2.

Months.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
Erysipelas....	87	75	110	123	122	68	49	32	23	40	63	67	859
Pyæmia.....	12	13	19	23	32	30	20	11	14	17	9	19	219

The facts reported were taken from the hospital register, and not from notes of cases, and are therefore but approximative in the case of erysipelas, since the tabulated ones are those only in which the disease was either present on the patient's admission, or in which it had an unfavorable termination. Cases of erysipelas, complicating wounds or other injuries, and terminating in recovery, would not be found recorded in the register. The number of cases of erysipelas, therefore, which have been treated in the hospital during the period mentioned, must be considerably larger than that which appears in the report.

In collecting the cases of pyæmia, this source of error was avoided, inasmuch as this disease being uniformly fatal, almost every case must have been entered in the register as a cause of death. There is reason to suspect, however, that owing to the imperfect manner in which pathological inquiries were made in former years, a certain number of cases of pyæmia were overlooked, having been neither recognized during life, nor detected on post-mortem examination. Such cases, would, therefore, be recorded under a false name in the hospital register, and would not appear in the table.

Dr. T. K. Cruse, late house surgeon of Bellevue, in an article on "The Treatment of Compound Fractures of the Leg," which also appeared in *The Record*, states that "Bellevue hospital has reached a period in its existence when, in the words of Billroth, the building is a mere slaughter-pen of the wounded. Spite of the most careful and judicious sanitary arrangements, recovery from an amputation of the thigh for injury, is without the recollection of the oldest inhabitant; and when the surgeon finds pyæmia follow exsection of the elbow, and in fact the most trifling operation whereby the medullary canal of a bone is in any wise invaded, he is sorely tempted to refrain from interfering in such cases, not willing to subject himself to the imputation of hastening a termination which he knows must be death, whatsoever course he followed." *

* Patients of the Marine Hospital Service were formerly treated in this hospital, but owing to the large percentage of mortality among them, it was deemed wise to discontinue sending seamen there.

The Marine Hospital at Chelsea, Mass., although in use only about thirteen years, has scarcely ever been free from erysipelas for several years, and cases of pyæmia, though not reported as such, are believed to have occurred. On the 1st of May last, erysipelas broke out in the Marine Hospital at Saint Louis, as the result of overcrowding; the wards, like those of Chelsea, being badly planned and poorly ventilated. In a very few days, nearly every patient showed evidences of the poisonous influences to which they were exposed. The Supervising Surgeon visiting the hospital at this time, directed that the patients should be removed from the building, and the wards cleansed and thrown open for a number of days to the free circulation of the winds.

An outbreak of pyæmia or erysipelas, should be the signal for prompt, decided action. The patients who are attacked with the disease should be removed at once, and the ward emptied, thoroughly cleaned, exposed to sunlight, if possible, and to the free circulation of air day and night; the walls and ceilings should be scraped and whitened with lime, or, if they are painted, thoroughly washed with soap and water. If this does not prevent the recurrence of the dreaded diseases, the plastering should be removed and replaced by new; and if this does not prove effectual, it would, in my opinion, be wise to tear down the infected building, or burn it up.

That the Jews were familiar with some of the practical measures herein proposed, is shown by the following passage from the Old Testament:

And the priest shall come again the seventh day, and shall look; and, behold, if the plague be spread in the walls of the house; then the priest shall command that they take away the stones in which the plague is, and they shall cast them into an unclean place without the city; and he shall cause the house to be scraped within round about, and they shall pour out the dust that they scrape off without the city, into an unclean place; and they shall take other stones, and put them in the place of those stones; and he shall take other mortar, and shall plaster the house. And if the plague come again, and break out in the house, after that he hath taken away the stones, and after he hath scraped the house, and after it is plastered; then the priest shall come and look; and behold, if the plague be spread in the house, it is a fretting leprosy in the house; it is unclean. And he shall break down the house, the stones of it, and the timber thereof, and all the mortar of the house; and he shall carry them forth out of the city, into an unclean place.—*Lev.* xiv, 39, 45.

Florence Nightingale, in her *Notes on Hospitals*, says: "No stronger condemnation of any hospital or ward could be pronounced than the simple fact that any zymotic disease has originated in it, or that such diseases have attacked other patients than those brought in with them. And

there can be no stronger condemnation of any town than the outbreak of fatal epidemics in it. Infection, and incapable management, or bad construction, are in hospitals, as well as in towns, convertible terms."

It is believed that the evils described in the foregoing pages may be avoided by conforming to the following general system of construction and disposition of hospitals, of which, as to construction and arrangement, the proposed Marine Pavilion-Hospital at San Francisco, authorized by an act of the Forty-second Congress, will serve as an illustration.

The wards and the buildings devoted to the kitchen and laundry are grouped around the executive building, with which they are connected by a covered corridor, provided with a sunk railway-track, on which to run a hand-car for the easy transportation of heavy articles from one building to another.

The buildings are to be constructed of California redwood, and, excepting the executive building, will be one story in height. The estimated total cost of the wards and associate buildings, including the residence of the surgeon, is about $58,000; thus securing the most favorable conditions for the recovery of the sick and disabled in a comparatively economical manner, and combining, in the arrangement, the advantages of three distinct hospitals with the greatest convenience and efficiency of administration. Some of the details of the plan of this hospital are given in the following discussion of

HOSPITAL CONSTRUCTION,

As a prerequisite to which the selection of a suitable *location* is important. A hospital designed for the treatment of acute diseases should be so located as to be easily accessible. The site should be free from nuisances of every kind; abundantly supplied with pure fresh water; sufficiently elevated to insure good surface and sub-soil drainage, and isolated to an extent sufficient to give the grounds the necessary exposure to currents of air. Although the San Francisco Hospital is not yet located, owing to causes stated in the report to which this paper is appended, it is to be hoped the foregoing desiderata will be secured in the site ultimately determined upon.

Basis of hospital arrangement. — The hospital proper should consist of pavilions or separate detached buildings of wood, one story in height preferable, and of simple

architectural design, constructed with the view of destroying them so soon as the peculiar hospital diseases, erysipelas, pyæmia, gangrene, etc., are engendered by the cumulated miasm of the patients, a condition which usually obtains after the continued use of a ward for ten or fifteen years, the time depending mainly upon the amount of air-space to each patient and the character of the ventilation.

Ground arrangement of wards.—The pavilions for the sick should be arranged on parallel or radiating (fan-shaped) lines, running as nearly as possible north and south, thereby receiving the direct rays of the sun during the larger portion of the day.

Distance between the wards.—In determining the distance between the pavilions the elevation of the site and the natural exposure to sunlight and currents of air should be taken into account. An intervening distance, between the buildings, of double the height of the pavilions will usually be found to be sufficient.

Number of floors.—The most healthy hospitals are pavilions with one floor; this is because they require less practical care to secure good ventilation. A pavilion with two floors is not seriously objectionable, provided the system of ventilation is distinct for each floor. Beyond this the ventilation is apt to be imperfect, and the care and proper supervision greater than is likely to be given.

Number of wards to a floor.—There should be but one ward to a floor. Cross-walls or partitions obstruct the ventilation, and it is not probable that the strictest care can prevent the foul air passing from one ward into another on the same floor where there is a communicating door. The only plan in which two wards on one floor are admissible is where the administrative offices and the stairway to the upper wards are in the centre of the building, with access to wards right and left, as in the new Marine Hospital at Chicago.

Size of wards.—The larger the ward the greater the number of patients that can be accommodated, and the fewer the number of attendants required in proportion, as well as the greater the facility of supervision. There is a limit, however, to the size of the ward fixed by sanitary and economical conditions. The ventilation is found to become impeded if the length of the ward is over five times the width. As a general rule the length should not exceed four times the width. The most desirable width is twenty-eight feet, but in no case should it be less than twenty-five nor more than thirty feet, and the height should

be about seventeen feet; the latter will, however, be governed in a measure by the length of the ward, but should not be less than fifteen nor more than twenty feet.

Cubic space.—The amount of cubic air-space necessary to each patient depends, first, upon the effectiveness of the ventilation, and, consequently, upon the size of the ward; and next upon the location of the hospital, whether it be located in the centre of a large city or in the open country. In a city, the allowance should not be less than 1,800 feet per patient for large wards; while small wards should have a capacity of about 2,500 cubic feet per patient, for the reason that the severe cases are usually placed in the small wards, and also because of the greater difficulty of ventilating them.

Superficial space.—A matter quite as important as the cubic air-space is the superficial area allowed to each bed, which, as a rule, should not be less than 100 feet.

Number of patients to the ward.—In accordance with the foregoing rules a ward 28 feet wide, 17 feet high and 120 feet long will accommodate thirty-two patients, giving to each 105 feet of surface area, and about 1,800 cubic feet of air-space.

Small wards.—Small wards are necessary in connection with a large hospital, for the purpose of isolating certain patients; but, as far as possible, such wards should be independent of the large ones.

Bath and wash-rooms and water-closets.—These should be separated from the ward by a well-ventilated passage. The building for these purposes is attached to one corner of the ward, nearest to which is the wash-room, provided with porcelain basins supplied with hot and cold water; next beyond is the bath-room, which has a bath-tub, sitz and steam-bath, and a marble table, which is convenient in treating cases of sun-stroke, etc. The room containing the water-closets should be separated from the passage to the ward by a door fitted to swing both ways, and which should always remain closed when not in use. The basins with syphon traps thould be well supplied with water, and arranged with close-fitting covers and a steam-pipe opening within the enclosure to enable the basin to be disinfected from time to time by steam. The sink for ward-slops, etc., should be in the same apartment with the water-closets. The water-system for closets, although attended with many disadvantages, is believed to be preferable in large hospitals, provided the sewerage is good and the drain properly ventilated. The latter can be accomplished

by carrying the soil-pipe, full size, through the roof and leaving it open for the escape of all gases. The use of the dry-earth system in the marine hospitals has not been attended with fully satisfactory results; the partial failure being due, no doubt, to want of care. The conditions for the successful use of dry earth are simple, being merely the application of a sufficient quantity of dry powdered earth to completely cover the excretions and absorb all the fluids; but it has not been shown that the resulting mixture, although rendered inodorous, may not, under certain circumstances, emit poisonous exhalations.

Reading and smoking-room.—It is desirable to have a room connected with each ward where the patients, who are well enough to leave their beds, can sit during the day to read and smoke.

Nurses' rooms.—In the plan of the San Francisco Marine Hospital the principal nurses' room is placed near the entrance of the ward, and is provided with a window which commands a view of its entire length. By this means the supervision of the nurse is made easy and more effectual, which is quite essential to proper care of the sick. Patients are often saved from serious mischances by the timely intervention of the nurse, so that the importance of this is obvious.

Ward dining-room.—This is located opposite the nurses' room and is provided with a small range for special-diet cooking, preparing fomentations, etc.

Material for floors.—One of the uniform defects in the old marine hospitals are the poor floors. Hospital floors should be made of a compact, close-grained wood, such as cherry, oak, or ash, and with the joints filled with white lead in oil to insure an impervious surface. The floors of the new Marine Hospital at Chicago are laid on cement, which is filled in between the iron joists. This prevents the possibility of any filth accumulating under the floor. It is important to fill the pores of the wood to prevent the floor from absorbing or holding water. This may be accomplished by laying on, with a brush, either paraffin dissolved in one of the cheap hydrocarbon oils, or boiled linseed oil or beeswax. The old custom of scrubbing or scouring the ward-floors should be abolished.

Walls and ceilings.—Scarcely less than the floors, the walls and ceilings of a hospital require a smooth, hard, non-absorbent surface. That plastered walls absorb organic effluvia and become poisonous to the occupants of the building, abundant examples prove.

A case was reported to the French Academy of Medicine in 1862, in which an analysis of the plaster of a hospital wall gave forty-six per cent. of organic matter.* As has been already shown, the Jews, the earliest sanitarists, understood this subject and applied a practical remedy. They scraped the walls and carried the dust "without the city into an unclean place;" and when this did not suffice they tore down their stone houses and disposed of the stones, mortar, and timbers in the same way.

Walls of Parian cement are recommended and used abroad; but as the cement, from its hardness, is liable to crack when applied to the lathed walls and ceilings of wooden buildings, its use would not be practicable for such hospitals as are now recommended. Until some better material for covering walls is discovered or invented, it is believed that a smooth lime and sand plastered surface, painted with several coats of lead in oil, and frequently washed with soap and water; or such a wall frequently "whitewashed" with lime, and periodically scraped, will give as good results as any plan now in use, excluding those which would be considered too expensive.

The process of painting or scraping and "white-washing" the walls would necessitate the vacating of the ward for a time; but this is desirable, since the vacating of a ward from time to time and opening wide the windows to admit free currents of the outer air will remove the peculiar hospital odor, a fact which I have observed in examining some of the old marine hospitals which have been abandoned for a time. It seems almost superfluous to add that the walls should be free from all unnecessary angles and ornamentation upon which dust would be liable to lodge. The wood-work of a ward should be severely plain, so as to be easily cleaned. Pine, covered with several coats of shellac varnish, answers the purpose well, and is economical.

Light, heat, and ventilation.—The windows of a ward should be opposite each other, and should be arranged at such intervals as that not more than two beds need be placed between any two windows. Such an arrangement affords abundant light, which is as necessary for man as for plants, and, in addition to its physical sanative effects, the patients are enabled to read in bed, thus affording healthy exercise to their minds—an employment worthy of encouragement as a sanitary measure. In the plan of the

*Galton, 1869, p. 23. Plastering-hair probably formed a large portion of this enormous percentage.

San Francisco Marine Hospital the windows are three feet wide, seven feet apart, and come within three feet of the floor. Over each window there is a large transom, which may be opened to any degree, or closed, by means of a cord working over the pulley. By opening every other transom and raising the opposite corresponding window from the bottom a few inches, and placing vertically on the sill a board, which should be about twice as wide as the opening and a few inches removed from the window, a free interchange of the outer and inner air may be obtained without exposing the patients to direct draughts of air.

This mode of ventilation can be used to any considerable extent only when the temperature of the outer air is mild. The open fire-place is the best ventilator of a ward when the weather without is such as to render it necessary to keep the windows and doors closed, and no ward should be without an open grate, no matter what other mode of heating is adopted.

It is intended to warm the San Francisco Hospital by two open fire-places placed along the centre of each ward, a plan adopted in the Herbert Hospital, Woolwich, England. The chimney will pass under the floor, and, on reaching the outer wall, enter and pass up through the centre of the fresh-air flue, opening into the ward near the ceiling. By this arrangement the outer fresh air will be warmed several degrees in its passage to the ward, thus utilizing, to some extent, the escaping heat of the chimney. The fire-place is lined with fire-brick, and arranged with cast-iron grating for the coal to rest on. "A clear space, half an inch deep, is formed between the back-lump and iron back to receive a supply of air through the ash-pit under the grate, which passes through a slip in the fire-lump immediately above the fire. The air thus brought into contact with the heated coal is received at a high temperature, in consequence of passing through the heated fire-lump, and is forced into contact with the gases from the coal by means of the piece of fire-lump which projects over the fire at the back of the grate, and thus a more perfect combustion of smoke is effected than with an ordinary grate; in fact, with care, almost perfect combustion of the fuel and consequent utilization of the heat can be obtained."* In the use of this grate the air of the ward is warmed by direct radiation from the fire in the open grate; by radiation from the sides, back, and top of

*Galton, pp. 87, 88.

the iron casing of the fire-bricks, (which casing, owing to its extent and to the intermediate air-chamber between it and the fire-bricks, does not become so heated as to burn the air;) and by the heat in the chimney, which warms the incoming fresh air.

Drainage and sewerage.—All drains should be ventilated. This is best accomplished by continuing the main drain-pipe (into which the lesser ones enter) straight up through the top of the building. The drains should not pass under any portion of the hospital, and consequently should be placed in the outer walls. Care should be taken that no fresh air supply-flue opens near the sewer.

Kitchen.—The kitchen and provision store-room should be separated from the wards. In the plan of the San Francisco Hospital the kitchen, provision store-room and general dining-rooms are located in a distinct building, connected with the wards and other buildings by a covered corridor. Each ward is also provided with a small dining-room for the accommodation of such patients as are unable to walk to the general dining-room, and for other purposes already mentioned. Properly cooked food is a desideratum of primary importance in a hospital, and in order to secure it the kitchen should be provided with adequate facilities for cooking the food in the best manner. The kitchen of the new Marine Hospital at Chicago, recently fitted out, contains an 8-foot range provided with the usual accompanying utensils; a 20-inch broiler; a 40-gallon stock-boiler, fitted with a steam-coil inside, for preparing the "stock" for soups; a steam-tank, in which to cook vegetables; a hot-water boiler, in which the water is heated by steam, etc. The special-diet kitchen contains a 4-foot range, on which to prepare articles of special diet, and a galvanized iron bake-oven of sufficient capacity to keep the hospital supplied with good, fresh bread.

Laundry.—While it may be admissible, under certain circumstances, to place the kitchen in the same building with the wards for the sick, the laundry should never be so located, but should be sufficiently remote from the wards as to avoid contaminating the air breathed by the patients. The room devoted to washing the linen should be of ample size, well supplied with water, and provided with means of ventilation adequate to the speedy removal of the steam. The soiled linen should be removed to the wash-house as soon as taken from the beds or persons of the patients, and, as soon as washed, dried, and mended, should be classified and laid on an open frame-work to admit of a

thorough airing. In the plan of the San Francisco Hospital the laundry has the same relative position to the wards and executive building as the kitchen and dining-rooms. For the sake of convenience, the building is made to serve the three-fold purpose of laundry, property store-room, and dead-room; but it will be observed that each is entirely separated from the other. Connected with the wash-room is a drying-room and a linen and mending-room.

Executive building.—The executive building should be centrally located so as to admit of easy and rapid communication with all of the other buildings. It should contain the office of the surgeon, a reception-room, a dispensary and laboratory, and may accommodate the operating-room. The executive building, as provided in the plan of the San Francisco Hospital, contains the rooms named, and connected with the operating-room is a wash and bath-room, and a small ward for the temporary use of patients after operations. In the second story of the executive building are the sleeping apartments of the steward, apothecary, matron, etc.

The surgeon's house.—The surgeon, or an assistant, should reside in the hospital or live on the premises, so as to be within easy calling distance at all times. The old practice of subsisting the surgeon and his family in the hospital, without regard to the extent of such family, and which had grown into a serious abuse, is abolished by the regulations approved by the Secretary of the Treasury, October 1, 1873. Anticipating this desirable change a surgeon's house was added to the plan of the San Francisco Hospital, with the belief that such provision will not only work economy to the service, but add to the efficiency and comfort of the surgeon.

Cost of the pavilion hospital.—The economy of the proposed plan of the pavilion hospital is best exemplified by a comparison of the cost of the old-fashioned hospital of the same capacity with the estimated cost of the one built according to the accompanying plans. The old hospital at San Francisco, which this is intended to replace, cost $231,871: the one now in use at Chelsea (port of Boston), cost $394,047; that at Chicago, just completed, cost $422,107; while upon the unfinished one at New Orleans $530,000 has been expended; being an average cost of nearly $400,000 for every hospital now owned by the Government of equal capacity with the one proposed.

The estimated total cost of the San Francisco Marine Pavilion Hospital, including the surgeon's house and all other buildings, is $58,789.56.

Editorial.

The Claims of Eclectic Colleges.

We have been regaled in the September number of the *Medical Eclectic* with an article on "Reformed Medicine" and "The Claims of Eclectic Colleges." This journal has for several years performed a part of Don Quixote in tilting against the ignorance of what it calls the "Old School," and breaking its lance to pieces in behalf of what, in truly Quixotic bombast, it calls "reform" in medicine. The article in question proposes to establish a chain of Eclectic Colleges all over the Union, to support them by the aid and influence of Eclectic Societies, and so to co-associate all the votaries of eclecticism, that their concentration may destroy their supposed great enemy, the "Old School." The assertions of its author abound with malicious or impertinent invectives and insulting epithets against the medical profession. The present article breathes such an air of animosity that it is poisonous and pestilent to the reader. It is warm in encouraging a general Catalianian conspiracy to overthrow the established colleges, and replace them by institutions which will be divested of many of the advantages and possess not the merits nor scope of the now existing schools of medicine. Gentlemen Eclectics! We do not propose to make war upon you, nor do we propose to retaliate your unworthy and abusive invectives, nor would we assume a patronizing air by saying that we pity the delusion under which you pretend to establish your new school of pretentions. To a vain man, or a too proud man, pity is an insult, and we abstain from any conduct which would offend, when we would prefer to conciliate and reform. The child who has just drawn its food from its mother's bosom, and then savagely scratches the breast to pieces and tries to bite off the nipple, is not considered responsible for its brutality and ingratitude. The dear little innocent knows not what it does, and the tearful mother covers it with caresses. Thus in the same

spirit, Eclectics, would we seek to win you back, and place you where you belong in the legitimate ranks of the medical profession, which is so regular in its constitution and consistent with all the correlative laws of natural science, that your secession can never break those ranks, nor interrupt the regular march of progress founded in the immutable laws of nature. Truly you may annoy and harass and impair public confidence in both the general medical profession and your own captious and reticent division. You propose new schools, new text books, and radical teachings of every kind. You say the graduates of the "Old Schools" must come as new beginners in your "New Schools" or they will forever remain ignorant and inexcusably unqualified to practice medicine. Do you propose to invent a new human body to dissect, new laws of chemistry to analyze and synthetically reproduce new organic bodies? Will you evolve from the earth a new botanical creation? Have you discovered a new histology, whose perversions and degenerations have reversed the known principles of pathology? or, in a word, what do you possess, with which to fill your programme, that is not our lawful property? When a man of science makes a discovery, or introduces a valuable new improvement, he is too happy to throw his contribution into the general fund of knowledge, and by doing good to others acquire honor for himself. This reciprocity of interests has built up the great edifice of scientific learning. Such a discoverer should not seek to disturb, by establishing new schools and new theories, the unity and affiliation of medical scientists. The existence of Eclecticism is not the fruit of scientific thought and theory, but of a quarrel. The initiative spark was insignificant at first, but has been gradually, for personal interests, so fanned into flame that medical unity and harmony throughout the Union is disturbed and dishonored. Alienation of schools is impossible. Two superstructures cannot well grow on one and the same foundation. Deprived of our basis of instruction, you have no capital in trade, and you become bankrupt in an hour. It

is only anarchists who seek to destroy what they can neither repair nor replace by a better substitute, as the Communists tore down the beautiful column in the Place Vendome— But, gentlemen Eclectics, medical science does not permit this division. The national good, the public weal, repudiates a baseless schism. We are all bees of the same hive. The general swarm cannot spare its "lost tribe." We seek no separation, but a noble reconciliation. The bees cannot part with your industry and your intelligent zeal. The hive needs your honey; and as for the sting, we *must* quote the words of a distinguished authority — your "*toxophilithic armature*" can be better employed on home defences, for which it was by nature provided.

Miscellaneous.

International Medical Congress.

We call the attention of the profession to the fact that the fourth session of the "International Periodical Congress for the Advancement of the Medical Sciences," will be held in the city of Brussels, Belgium, on the 6th of September, 1875. The circular issued by Prof. E. Warlomont, of the Royal Academy of Medicine, of Belgium, General Secretary of the Congress, gives in full the details of the proposed re-union, which will continue for one week. Delegates from Medical Associations, national and foreign, will be admitted by presenting their credentials to the General Secretary, and will have the exclusive privilege of taking part in the discussions.

Members of the Congress will be assigned to five sections: the first, on Medicine, Surgery and Obstetrics; the second, on Military Surgery; the third, on Hygiene; the fourth, on Ophthalmology; and the fifth, on Pharmacology; each member being assigned to that section which he shall designate, and to more than one if it shall be so desired.

Those who are to present reports to the sections, will be designated by the committee appointed for that purpose; but other reports and communications will be received, not announced in the special order, the subjects of which are germane to the field assigned to each section. The definite conclusions adopted by each section will be submitted to the General Assembly by special reporters, selected by the former from among their number.

Those who desire to present communications on subjects not included in the order of business, must apply for permission to do so, at least one month before the session of the Congress, to the General Secretary. Permissions will be obtainable from the Committee on Organization, which will decide, also, as to the order of such extrinsic business.

Each speaker will be limited to twenty minutes in the discussion of a single question, but this limitation will not apply to the reporters of the Congress. All papers read before the Congress will be placed at its disposal, and, after its session, the Committee on Organization will decide as to the partial, total or non-insertion of such papers in its published transactions.

Although the French will be the language employed in the discussions of the Congress, members will be permitted to express themselves, if desired, in other languages. If it be considered expedient, interpreters will be employed to translate on the spot the communications addressed to the Assembly in such other languages.

The above is a brief summary of the facts represented in Professor Warlomont's circular, which we thought might be of interest to the readers of the *Examiner*. The editors will be pleased to give any further information in regard to the Congress which may be sought by those who conclude to take a special interest in its transactions.

Communications to the General Secretary may be addressed to "M. le Dr. Warlomont, 152 Rue Royal, ea Bruxelles, en Belgique."—*Chicago Medical Examiner*.

APHTHOUS STOMATITIS COMMUNICATED TO MAN THROUGH THE MILK OF A COW AFFECTED WITH THE SAME DISEASE.—A man partook freely of milk at a period when an epidemic of aphthous stomatitis raged among the horned cattle of the country. The symptoms commenced in less than half an hour after the ingestion of the milk. They consisted of vertigo, tingling in the ears, feebleness, afterwards delirium

and hallucinations. On the second day, vomiting and diarrhœa with abdominal pains set in, which promptly yielded to treatment by opium and subnitrate of bismuth. The fever, however, was not broken, and on the third day stomatitis appeared, with ptyalism, and the development of aphthæ on the inner surface of the lips and cheeks, on the palate, and the inferior surface and borders of the tongue. At the same time, there appeared a phlyctenular eruption on the hands, feet, perineum, and scrotum. The nervous disturbances, delirium, and insomnia were combated by opium, given in doses of fifteen centigrammes per diem, and the stomatitis by gargles of chlorate of potassium. At the end of fifteen days the patient recovered.—*New York Medical Journal*, July, 1874.—*Philadelphia Medical Times.*

THE DANGER OF MIXING CHROMIC ACID WITH GLYCERINE.—In preparing mixtures of this kind, which have been so highly recommended for diseases of the mouth and throat, care should be taken not to add these reagents together too quickly, for it is said that the fluid may take fire and explode. There is no danger if the glycerin be added drop by drop, for then a little warmth only will be generated.—*Il Raccogl, Med. Memorabilien*, 2, 1874. —*Philadelphia Medical Times.*

Book Reviews.

HOSPITAL AND HOSPITAL CONSTRUCTION. By John M. Woodworth, M. D., Supervising Surgeon United States Marine Hospital Service.

ANNUAL REPORT OF THE SUPERVISING SURGEON OF THE MARINE HOSPITAL SERVICE OF THE UNITED STATES, FOR THE FISCAL YEAR, 1873.

Very appropriately to our remarks on County Hospitals in the August number of THE LANCET appear the two above-named works. We cannot better entertain and instruct our readers in public hygiene than to quote at length the action of the United States Government in relation to its marine hospitals, and especially to instruct the profession in regard to the new system of the Marine

Hospital Service now in process of application in San Francisco.

The Government has learned that expensive hospital constructions, like the old Marine Hospital in San Francisco, and as, perhaps, may prove the costly edifice now built at Chicago, for the seamen of the northern lakes, are a fraud on the Government and exhaustive of the small monthly fees exacted by law from the wages of seamen. These impositions compelled the Government in self-defense to abandon the system of conducting marine hospitals under its own direct control, but resort to the contract system as an unavoidable alternative. But the contract system has shown itself a still worse failure, for the impositions wrought under the contract system, although they may have saved some money to the Government, have expended their baleful influence upon the unfortunate sailor. Hence it comes to pass that now our Government again resumes its full control over the Marine Hospital of San Francisco, and in adopting the new economical pavilion system, with a true paternal benevolence, will hope to place the invalid sailor and the worn-out mariner in the conditions which his hardy life merits, and which he has a full right to exact. Many are the anathemas which the suffering sailor under the contract system has hurled against his Government. How undeservedly, the enormous sums expended, as shown in the above circulars will prove. That the Government really has labored to the utmost to fulfil its obligations to the seamen cannot be doubted. The country scarcely appreciates the amount of sympathy, affection and solicitude which it owes to the unwearied mariner and wanderer over the sea. His only homestead is the ocean. He never strikes for eight-hour wages, but night and day, in calm or storm, springs at the call, leaving his miserable kit or bunk to obey his orders. "Pook Jack" is no pauper; it is not eleemosynary, the protective home he receives from the hand of his Government. The sailor's "snug harbor" is his rightful mansion, when from disease or old age he seeks to retire from his wandering

career. Of all our patients the sailor is among the very few who pays his medical fees long in advance of the disease which compels him to ask for medical aid, and pays his rent long before he becomes a tenant. Sailors do not love a hospital—it is only a dire necessity which drives him to its shelter.

We, therefore, without further elaboration of this subject, quote from the above circulars in another part of this number, and only regret that our space does not permit us to include the diagrams which accompany the excellent work of Supervising Surgeon Woodworth.

THE RELATION OF MEDICAL SOCIETIES TO PROGRESS IN SCIENCE. Inaugural Address of the President of the Medical Society of the County of Kings, New York, Alex. J. C. Skene, M. D., June 16th, 1874.

The author of this address has fully appreciated the value of the relationship of Medical Societies. Their co-operation commencing from the local Medical Societies, connecting with the State Societies and central boards of health, and thence extending by delegations, to unite their efforts through the American Medical Association, at its annual meetings, and thus bringing their united influence to bear upon legislative action, is the only method by which to elevate the standard of Medical Education throughout the United States.

As the author well remarks, legislative enactments in any one State requiring the higher grade of education, are of no avail. Such enactments are easily evaded by passing over into another State, where "Cheap John" institutions exist. Medical reform to be effectual, must be universal and co-operative through every State and Territory in the Union, and this end can only be accomplished by the persistent inter-association of Medical Societies.

It is high time that the medical profession should make a "strike" for higher consideration; unfortunately for this object, the popular view of general medical education, runs in a current precisely adverse to the desired movement. The tendency of public opinion is, that the student

of medicine, who possesses the mind, the education, and the financial means, with which successfully to climb the tree of knowledge, is required to clamber up as best he can, but the poor youth, irrespective of his attainments, must be boosted up by the aid of everybody's artificial means. Cheap education is, therefore, encouraged by the national voice, but that voice is wide-mouthed to exclaim against the ignorance which any graduate under those conditions may display.

In a word, it claims every facility, at the cheapest rate, for any illiterate, uneducated candidate, but at the next moment demands, in cases of emergency, the highest medical proficiency, and visits malpractice, with a voice of contempt, upon the whole profession. The author of this essay has criticized with a masterly hand, though very uncomfortably severe to many interests, the low standard of medical education, as permitted by colleges, chartered by legislatures, which are supposed to express the popular will. We admire the trenchant views of Dr. Skene, of Kings County, but, at the present time, we feel compelled to underwrite them simply as a forlorn hope ; but we will still hope and hope ever.

ESSAYS ON CONSERVATIVE MEDICINE. By Austin Flint, M. D. Philadelphia, 1874, p. 214. Henry C. Lea, Publisher. San Francisco: A. Roman & Co.

The high authority of Professor Flint renders any work from his pen desirable. These essays appeared some years since in different periodicals, and are now interesting as showing collectively the author's views of conservative medicine in the different departments of medicine and hygiene. These essays are for the general reader, and to him it will be consolatory to learn how to translate his infirmites into ordinances of "Divine Design."

A full review of an important work on "The Philosophy of Spiritualism and the Pathology and Treatment of Mediomania" is unavoidably laid over for our next issue.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR OCTOBER, 1874.

Original Communications.

Operation for Remedying a Deformity of the Hand, Arising from a Severe Burn—Good Result.

BY CHARLES B. BRIGHAM, M.D., SAN FRANCISCO.

T. C. æt. 17.—When two years of age the patient was severely burned in the left arm and hand, his clothes having caught fire from the flame of a candle. The arm was superficially injured, while the skin of the hand was more or less destroyed. The appearance of the hand fifteen years after the injury is as follows: It is considerably bent inwards, owing to a contraction of the fascia along the side of the wrist; the thumb is badly scarred, but is entire; the index, middle and ring fingers somewhat webbed by cicatrices, have each their three phalanges and a rudimentary nail, but they are so stunted in growth as to look more like toes than fingers; the little finger is turned backwards and rests under the skin of the back of the hand; a nipple-like projection over the head of the fourth metacarpal bone alone indicates the presence of a finger. The entire

skin of the hand is cicatricial, poorly nourished, and constantly cracking and peeling off in scales ; there is considerable force in the stumps of the other fingers, but the little finger is not only useless but, by its position, interferes with the wearing of a glove, besides adding to the already great deformity of the hand ; it is movable to a slight degree at the will of the patient—a fact which would lead to the decision that the tendons and the metacarpo phalange articulation were still unimpaired. It was a question of doubt whether to free the finger by the knife, or, placing it in relief as much as possible, to pass several ligatures under it and then tightening them, to allow the finger to separate from the subjacent tissues. The latter course seemed to promise the more favorable result, and so on the 23d of June 1873, the patient being etherized, eight ligatures were passed by a curved needle, from the tip of the finger nearly to its base ; they were then moderately tightened and tied, and the whole hand was dressed with carbolized gauze. Evening, P. 66, T. 99—One-fourth grain of morphine was given subcutaneously ; the patient passed a comfortable night, and the next day the hand was free from redness and swelling ; the finger, however, caused considerable pain ; there is no discharge from the sutures. P. 65, T. 100—June 25th.—The finger is of natural color and temperature. In the evening the patient complained of a pain in the bowels, followed by a slight chill. T. 102, P. 104.—Both ears were quite red, the face was yellowish, the tongue coated and moist ; the patient had considerable thirst and great depression ; the bowels were open, but there was no diarrhœa. A teaspoonful of a mixture (containing equal parts of Liq. Ammoniæ Acet., Spirit Ætheris Comp., Spirit Ætheris Nit.) was ordered every two hours during the night ; on the next day he felt better. P. 92, T. 100—A slight brown line was noticed above the ligatures on one side ; there is no suppuration as yet. July 1st—P. 65, T. 99—Six of the ligatures are nearly through. During the three days following the finger seemed to gradually leave its bed of its own accord and approach the

other fingers; two of the ligatures still hold firmly, the others have come away in a mass; the granulating surface on the back of the hand measured half an inch in width; it was dressed with Lister's dressing. On the 8th of July another thread was passed through the granulations at the base of the finger so as to cut off a slight band of tissue, which, owing to the length of time taken by the ligatures to come away, had formed between the threads. July 10.—Five bits of epidermis were placed among the granulations of the wound of the hand in hopes of their uniting; two of them did so, but aided so little in the cicatrix that it is hardly worth counting. On the 25th the wound was cicatrized; all this time the under side of the little finger had been cicatrizing. In its new place the finger was apparently twisted so that the wound looked upwards and inwards; a long narrow splint was arranged so as to hold the little finger in place. On the 1st of August all that remained to complete the cure was a small patch of granulations on the back of the little finger; it was dressed with dry lint, and nine days afterwards was quite healed. About a month later, as the result of a blow, the cicatricial surface on the back of the hand cracked open and discharged slightly for three weeks, closing for a few days at a time; at last it became hard again like the rest of the tissue of the hand; the little finger has remained well in place, in a line with its fellows; and, although fifteen months have elapsed since the operation, it has showed no disposition to return to its former situation.

The deformities of the hand arising from the effects of burns are the most difficult of all to treat successfully. The dragging of the cicatricial tissue lasts for so long a time, and with such slow but irresistible force; indeed, Delpech believes that it persists throughout life. On this point, however, Panas says: "It is to-day well established that after a sufficiently long but definite time the new tissue loses its power of contraction with which it is at first so endowed, and ceases to act on the neighboring parts.

To arrive at this period sometimes months, sometimes years are necessary."—"Nouveau Dictionaire de Médecine et de Chirurgie Pratiques, T. vii., P. 591." The same author describes admirably the changes which are effected in a newly-formed cicatrix after a severe burn: "There is 1° a cellular or fibrous transformation of all the nuclear elements still existing in the cicatrix; 2° absorption of lymph between the cells and fibres; 3° atrophy or disappearance of the numerous vessels of new formation and impediment to the circulation; the blood can no longer circulate as easily as before on account of the contraction (better reduction) of the cicatricial tissue. It is then that the new tissue becomes dense and resisting; from this time forth looses in volume in every sense, and draws towards it as a centre all the neighboring parts, at the same time that a dead white color takes the place of the redness of the cicatrix." In the Dupuytren museum at Paris there is a specimen of a hand in which, as a result of a burn, all the fingers are drawn backwards and united together. Malgaigne mentions a similar case of Dutertre, in which that surgeon "freed all the fingers from the palm of the hand, then separated them one from the other, and thanks to well arranged dressings, succeeded in remodelling the hand so as to resemble a normal one. The patient could pick up a cherry by the stem between the index finger and thumb. Indeed, the Society of Medicine of Paris, before whom he exhibited the patient, awarded him the 'prix d'émulation.'" Malgaigne, however, believes, as nothing more was heard of the patient, that after a certain time the fingers were drawn back to their old positions. With our patient, so long a time has elapsed since the operation (fifteen months), that there is reason to believe that the finger will remain in its present good position.

IT is quite useless for us ever to attempt to reason a man out of a thing he has never been reasoned into.—*Dean Swift.*

Fungus Hœmatodes in a Child Sixteen Months Old.

BY F. DELMONT.

The following case of fungus hœmatodes occurred during the practice of F. Delmont, of Lower Lake, in the year 1871:

January 1st, 1871, I was called to see the daughter of Mrs. A., of Lower Lake, her fourth child, for what the parents called sore eyes. On inquiring into the case, I learned that the child had become blind when six months old. She was then in her sixteenth month, a bright, intelligent child, more so than usual, and walking about, the body apparently strong and healthy. On close examination, I found the left eye abnormal, the pupil dilated and immovable and of a greenish hue, with a solid, rugged and unequal substance proceeding towards the cornea. Soon after the eyeball became irregular and knobby, when I advised the parents to have the child operated upon. By that time the cornea began to ulcerate from pressure and a fungus made its appearance; the surface was unequal and bled profusely upon the slightest touch. By the 18th of March the parents decided to go to San Francisco; the size of the tumor protruding through the orbit being now as large as a pigeon's egg. On the 25th of the same month, after the tumor had been growing for three months, she was successfully operated on by Dr. A. B. Stout, of that city. After this she seemed to be improving for a short time, when the right eye became affected with the same disease, the fungus growing to the size of five inches in circumference, bleeding profusely at intervals. By this time the fungus on the left eye commenced to grow out again, increasing to about six inches in circumference. In June the growth of the fungus was so rapid that the bones of the face were pushed out of their places, the face presenting the appearance of a mushroom. There was profuse hemorrhage and deep ulcerations. The patient died on the 1st of July, from exhaustion, the tumor having increased so much as to protrude through the mouth.

This case seems to prove cancer hereditary, the great-grandfather of the child having died with cancer of the face, the nose and eye having been destroyed by it. The great aunt died with cancer of the breast. The father of the child has the cachexia of it, and of five remaining children, two present marked appearances.

[In this case, on dissecting the globe of the left eye, which was buried in the fungus growth and resected with it, the lens was found calcareous in its external layers, and softened in the centre.—EDITOR LANCET.]

Surgery.

The Modern Methods of Treating Fractures—What have they Accomplished?

BY DR. FRANK A. HAMILTON.

Before passing to the consideration of his subject, Dr. Hamilton said that in the treatment of fractures it is especially important to the surgeon to know what he can expect as a satisfactory result. An erroneous impression did exist, and does now exist. Malgaigne said, many years ago, that the public did not understand the average result of success. Thirty years ago there was scarcely a surgeon in this State who had not been prosecuted by patients for the treatment of fractures. In no other disease excepting dislocation is, or was, the surgeon liable to this money indemnity. If he operated on a case of hernia, and the patient died, there was the end of it; but in fractured limbs, instead of the patient paying the doctor, it was frequently the reverse. Dr. Hamilton at that time collected a large number of cases—over 400—from the hospitals of the large cities, and issued a brochure, and he was happy to state that since that time prosecutions became less common, till they nearly ceased to occur. Many a surgeon of ability was driven from practice from the fear of actions in the courts. The Doctor then proceeded to consider the paper of the evening.

At the present time there is a tendency, as there was thirty years ago, to estimate the results obtained. It is now claimed that plaster of Paris, in fracture of the femur, will yield results that have never been obtained before. This method is not specially new, though it has been re-introduced within the past few years.

Henriques, in 1814, used the plaster in the form of moulds. In 1852 it was revived in Holland, much the same as it is to-day at Bellevue Hospital. In 1854, Pirogoff announced his conversion to the use of plaster, but he used it in strips laid parallel to the limb. Other surgeons on the continent followed in the views of Pirogoff, but for all, it did not become popular.

In 1834, the starch bandage, as an immovable dressing, came into use at Brussels. This was, in its manner of appliance, exactly the same as the plaster bandage of to-day, with the use of starch instead of plaster of Paris to stiffen the muslin. In eight or ten years this plan became very general. Those who are here to-night, and are of the old generation, will recollect its use in the New York Hospital a quarter of a century ago, but it fell into disuse, and I think mainly from the bad results which occurred in its use. But we have now, with the younger generation of surgeons, those who, ignorant of the experience of the starch bandage then, claim results from the plaster better than were obtained then. I ask, in what respect can plaster have any special advantage over the other? They are both immovable dressings. I wish to criticise three papers which have emanated from Bellevue within the past few years, in respect to the results that have been obtained in fracture of the femur. One is by Dr. S. B. St. John, formerly House Surgeon; one by Dr. Bryant, also a former House Surgeon; and one by Dr. H. B. Sands, Visiting Surgeon.

Dr. St. John claims, in his paper, to have obtained 25 per cent. of perfect results in this fracture. Dr. Bryant reports twenty-three cases, and gives thirteen, or over 50 per cent., as being perfect.

Dr. Sands also gives a high degree of success. There is one thing to be regretted, and that is, that we have no means of knowing how many of these cases, if any, have done duty twice in the reports, there being no possibility of tracing them back to the records. I have myself followed up the matter, and find that in twenty cases of fracture of the femur, one case was perfect, two cases in which there is three-eighths of an inch of shortening, and in the remainder the deformity was greater.

If the results are correct that have been obtained by Drs. St. John, Bryant, and Sands, all who do not get their averages of success are culpable, and it is a thing upon which we should be well and correctly informed.

It is the custom, in cases of fracture of the femur, when done up in plaster, to allow the patient out of bed within eight or ten days. I am of opinion that this increases the liability to imperfect and bad results, and believe we can do better for the patients by keeping up extension by means of Buck's extension, or some modification of it.

Dr. Gurdon H. Buck, in response to an invitation for expression of opinion, said that however excellent plaster might be for an immovable dressing, it had never occurred to him to be indicated in fracture of the femur, where it is exceedingly important from time to time to examine the process of repair and see how it is getting on.

Punctured Wound of the Kidney—Recovery.

Dr. J. J. Castellanos reports in the *New Orleans Medical and Surgical Journal*, July, 1874, the following important and remarkable case :

Joseph Mazzet, æt. 36 years, of a bilious nervous temperament and of dissipated habits, was wounded on Sunday February 8th, 1874, at 2 o'clock in the morning, in the right renal region, the wound ranging from outwards, inwards, and obliquely downward, and producing severe external hemorrhage. From the width and extent of the slits and rents which the puncturing instrument seemed to have made upon his vest, shirt, under-shirt, and pants, it was evident that the thrust had been directed quite vigorously, and it was to be presumed that the wound was a deeply penetrating one, and therefore of a serious nature. My friend, Dr. Wiendahl, was called to see the case later in the morning, and reports that patient had voided darkened bloody urine at 6 o'clock, i. e., four hours after the wounding, and continued to void similarly colored urine for three days. On the fourth day, having had castor oil administered to him to relieve constipation, which had been induced by opiates and styptics, patient had a recurrence of active, pure hemorrhage, of nearly a quart in quantity. This hemorrhage persisted, though in smaller

quantity, for four or five days, after which another hemorrhage, not as copious as the former, set in. This persisted also, with some intermission, for several days. The date of last profuse hemorrhage was February 28th, i. e., twenty days after the infliction of the wound. Large clots were then voided, and prolonged syncope followed, so severe, indeed, as to lead us to surrender all hope of recovery for our patient. This, however, was the last hemorrhage; patient continued for several days to void discolored urine, with now and then small coagula, which disturbed the patient exceedingly, inasmuch as he had a stricture of the urethra, and had been suffering for several years past from chronic cystitis and membranous urethritis.

This case I diagnosed punctured wound of the kidney, the knife having gone through both the cortical and tubular substances into the pelvis of the kidney, causing the severe hemorrhage, the flow of which the patient was sometimes made aware by the gurgling and peculiar "opening of a stop-cock sensation" which he describes, as the blood poured from the right ureter into the bladder.

Upon reference to books, I find my case peculiar by the absence of two important symptoms, namely, external escape of urine from the wound, and retraction of corresponding testicle, the burden of explaining which I decline to assume.

My case made a perfect recovery. I have followed it, in consultation with Dr. Wiendahl, since the fourth or fifth day of the infliction of the wound, and have accurately set down the facts I submit to-night.

Amyloid and Fatty Liver in Relation to Operations.

Mr. Richard Barwell details two cases of hip-disease in children, which had been attended with prolonged suppuration, and in both of which a cachectic condition had ensued, attended with extreme enlargement of the liver. Operations for the relief of the joint-trouble—in the one case amputation at the hip, in the other excision of the necrosed bone—were both followed by great improvement and subsequent recovery, *with a gradual return of the liver to its normal size.*

We often see in such cases as these, where free suppuration has existed for a long period, a uniform increase in the size of the liver, which does not affect by pressure or obstruction the portal circulation, since it is not accompanied by ascites; and, though it may diminish, it does not annihilate the secreting function of the gland, since the fæces are colored with bile and since there is no jaundice.

This enlargement is due to the deposition in the constituents of the organ either of oil-globules (the fatty liver), or of a material called amylaceous (the amyloid or lardaceous liver).

Now, in healthy life fat is frequently present in and is often removed from the liver. It is therefore plain that recovery from its morbid accumulation in that organ is a much more easy process, a far more likely event, than restoration to the normal condition of a liver infiltrated with so immobile a material as that which constitutes the amyloid deposit.

Amyloid liver may be suspected if the organ attains a very large size, if there be obstinate and recurrent diarrhœa, with cast-off villi in the excreta but no pus or sign of ulceration, or if there be albumen in the urine.

If, after careful investigation on these points, the absence of any sign of amyloid disease save the enlargement of the liver be determined, any operation for the removal of suppuration is not only justifiable, but our imperative duty. Without operation the patient must die; after operation, however hard, large, and changed be the liver, there is a fair, indeed a considerable, chance of recovery.

Mr. Barwell believes that in both his cases there existed amyloid disease of the liver, although he admits that he is unable to prove absolutely his position, and that the whole balance of opinion is that amyloid disease once commenced is of necessity a progressive and fatal malady.—*The Lancet.*

TREATMENT OF VARICES BY THE LOCAL EMPLOYMENT OF PERCHLORIDE OF IRON.—Dr. Linon, of Verviers, has used perchloride of iron locally with great success during the last three years in the treatment of varices. The strength of the solution is about two and a half drachms to eight ounces of water. Compresses of flannel are steeped in the water, then wrung out, and applied by means of a flannel bandage, which is only to be moderately tightened. This application is to be kept on twenty-four hours, and

on removing it the surgeon is much surprised to find that the venous dilatations have almost entirely disappeared. The applications are to be renewed as above during seven or eight days successively, after which time the bandage is to be kept on, without any further wetting, till it gets loose. It is then to be wetted again with the solution, and applied, until the varices have disappeared, which generally takes place after eight days or a fortnight, according to the size of the swelling. These simple means have removed in a few days enormous varices, accompanied by violent pain, with black spots on the surface, and have restored to the patients the use of their limbs. By the unsuccessful application of dry bandages only, Dr. Linon has been able to show that it is not compression, but really the local action of the iron which is efficacious. The local action of the thermal waters containing magnesia on the skin is similar to that of the perchloride. Thus at Luxeuil patients affected with varices derive great benefit from the Benedictine pond.—*Lancet.*

Facial Neuralgia Treated by Repeated Sections of Branches of the Trigeminal Nerve.—Dr. E. Andrews, (*Chicago Journal Nervous and Mental Diseases*, July, 1874) reports a case in which, at intervals of several years, he at four different times removed a part of one of the branches of the trigeminal nerve. Each time the operation succeeded in procuring several years of entire freedom from pain. Six years have passed since the last operation, during which the disease has not returned. The doctor observes that in this class of desperate cases, when the difficulty returns after a thorough operation, it is not generally in the same branch of the nerve. When it seems to be, it is often due to entanglement of the stump of the cut nerve in a cicatrix, subjected to traction by the adjacent muscles. Further, his experience confirmed the old rule, that the true seat of facial neuralgia is usually in some of the numerous bony canals through which the branches of the trigemini pass, and that the operation must always reach the nerve on the proximal side of these bony foramina, whose rigid walls in a state of disease may compress the nerve and its accompanying artery, and thus, in some cases, produce pain.

VARICOCELE TREATED BY THE ELASTIC LIGATURE.—J. L., aged 22, was admitted into the Queen's Hospital, Birmingham, under the care of Mr. West, on May 3d, he having a varicocele of some weeks' duration. On the 9th the vein was ligatured with an elastic ligature by Mr. West. On the 14th the ligature had cut its way nearly out, and was then removed. The patient was discharged well on May 27th, the vein being obliterated by a firm clot, but no suppuration taking place during the progress of the case. The elastic ligature has also been used in two cases of nævus by Mr. West and Mr. Wilders. In both cases the ligature came away on the fifth day, leaving a healthy granulating sore, and the children have been completely cured of the deformity caused by the nævi.—*Lancet*, July 4th, 1874.

FIVE INCHES OF SCIATIC NERVE REMOVED.—From the *Medical Record* we learn that at the Roosevelt Hospital, a female patient was recently admitted for a tumor, situated in the posterior part of the left thigh. When reached during the operation, the growth was found to be so intimately connected with the sciatic nerve as to compel the operator to remove a large portion of the nerve with the tumor. Hence, about five inches of the nerve were removed. In three weeks the patient was discharged from the hospital, with but slight impairment of motion or sensation.

CAMPHOR IN ERYSIPELAS.—M. Revillout states (*Gaz. des Hopitaux*, June 20th) that he has several times had occasion to employ with good result in erysipelas an application used by M. Delpech at the Necker. It consists in painting the affected surface with a solution of camphor in ether (equal weights); and when this is employed in erysipelas of the face, and the affection has not yet reached the hairy scalp, its progress is usually arrested. It is also very useful in erythema caused by local irritation.—*Medical Times and Gazette*, June 27th, 1874.

AFFECTATION in any part of our carriage is lighting up a candle to our defects and never fails to make us to be taken notice of, either as wanting sense or wanting sincerity.—*Locke*

Institutes and Practice of Medicine.

The Laws of Topographical Diagnosis in Chronic Diseases of the Nervous System.

BY PROFESSOR MORITZ RENEDIKT, OF VIENNA.
Translated from the *Allg. Weiner Med. Zeitung* by D. F. LINCOLN, M.D., Boston.

I will first of all state the most important laws of localization, as related to symptoms and groups of symptoms, and will then proceed to the Law of Diffusion.

In my own experience, I have found this law of the greatest possible value for unravelling complex groups of symptoms; I think no principle, since the enunciation of Bell's law, is capable of clearing up so many points. The attempt to refer the whole of a group of symptoms to one seat of disease has brought the greatest confusion into neuro-pathology; as examples of which I will only refer to the various localizations of tabes given by Remak, to the dispute regarding the localization of chorea minor, of dementia paralytica, etc. The law of diffusion may be stated as follows:

"When there is present a combination of symptoms, and groups of symptoms, refering to known but different locations, each symptom, or group of symptoms, must be located by itself at the point known to belong to it."*

Before this law can be made clear in all its aspects, we must, as before said, enumerate the laws of localization, so far as known to us; of which the first and leading principle is that known to Bell and Romberg as the law of concentration, which directs us to localize a disease at the point where all those fibres converge, the irritation or paralysis of which produces the symptoms of a given case. By this law I was enabled correctly to localize progressive muscular atrophy, infantile spinal paralysis, and progressive paralysis of the cerebral nerves, before the pathological anatomy of these diseases existed.

Those symptoms, and groups of symptoms, which we can definitely localize are the following:

1. Paraplegia, developed symmetrically and simultaneously, denotes disease of the anterior half of the spinal cord.

* Journal of the K. k. Ges. d. Aerzte, June 16, 1871.

Paraplegia of the legs commonly denotes disease in the region of the lumbar enlargement; that of the arms, an affection of the cervical enlargement.

Paraplegia due to disease of the vertebræ is usually characterized (subjectively) by the prevalence of symptoms relating to the roots of the spinal nerves, at first almost wholly unilateral; in disease of the sacral and lumbar vertebræ, unilateral ischialgia; in that of the dorsal vertebræ, intercostal neuralgia; in that of the cervical, cervico-bracial neuralgia. Furthermore, unilateral progressive muscular atrophy may occur, especially when the lower part of the cervical, and the upper part of the dorsal vertebræ are affected; later, the symptoms may become bilateral. It must not be forgotten that the spinal symptoms of spondylitis are not proportioned to the pressure of the bent vertebral column, but that a myelitis may exist, in extent quite independent of the amount and extent of pressure (Michaud).

2. Cerebral paraplegiæ arise from two distinct hemiplegiæ.

3. Characteristic symptoms of tabes denote a disease of the posterior half of the cord; spinal contractures and spinal epilepses (shaking palsies) are connected with disease, original or consecutive, of the lateral columns.

4. Progressive muscular atrophy denotes disease of the gray substance of the cord in the neighborhood of the central canal, or perhaps diffuse disease of the anterior roots; and the same inference is to be made when muscular atrophy occurs secondarily during the progress of a group of other symptoms relating to the cord.

In a special chapter of my work* I shall endeavor to show that the recent doctrine that progressive muscular atrophy is a primary myositis, is untenable upon clinical grounds; I hope also to prove that it is not the large motor cells, but other cells of the gray substance, that support nutrition.

5. Hemiplegia with crossed hemi-anæsthesia denotes disease of one lateral half of the spinal cord.

Reasoning from the analogy of the hyperæsthesia which follows the section of the sympathetic in the neck, it is probably beyond question true that hyperæsthesia of the *same* side, in unilateral disease of the cord, arises from destruction and paralysis of the vaso-motor nerves.

6. Bilateral tabetiform neuralgia of the legs or arms denotes (in case the origin of the disease is central) an

*Nervinpathologie und Electro-therapie.

affection of the posterior roots, or their prolongations to the posterior columns, and especially the innermost of the radiating fibres (Charcot). It is scarcely necessary to remark, that neuralgic affections located in the extremities of one side point to an affection of the brain.

7. Progressive paralysis of cerebral nerves denotes a more or less diffuse disease of the region of the nuclei of these nerves; or diffuse disease of the nerves, peripherally seated in respect to the nuclei, particularly in the case of chronic basilar meningitis.

8. Paraplegia of the tongue (alalia), and paralysis of deglutition, denote disease at the level of the hypoglossal and glosso-pharyngeal nuclei.

This principle is of especial importance in localizing the impairment of the function of speech which occurs in the insane; it was stated by myself in 1871 (l. c.), and has been confirmed by the researches of Lubimoff. The parapareses of the face, which so frequently accompany complicated groups of cerebral symptoms, and are usually distributed irregularly upon both sides of the face, may point to a simultaneous affection of both nuclei of the facial nerve.

9. Hemiplegia with crossed paralysis of the facialis or oculomotorius denotes disease of the fibres of the pyramids at the level of the nuclei of these nerves, or of the points of exit of the nerves.

10. Hemiplegia with hemi-anæsthesia of the same side, denotes disease of the fibres of the pyramids at the level at which the decussation of the sensitive fibres is complete, and upwards, including the passage of the external bundles of fibres from the pes pedunculi into the medullary mass of the hemispheres behind the nucleus lenticularis.

The latter region is especially to be considered, according to Turk, and it is questionable if the limits ought to be drawn as closely as is here done, following Meynert. Charcot, at least, holds to the more extensive interpretation given by Turk.

11. Hemiplegia with incomplete facial palsy, especially when the upper branches of the facialis are intact, points to an affection of the central motor ganglia of the brain.

I have seen complete facial paralysis, with crossed paralysis of the motor oculi and the extremities; proving that the fibres destined for the upper facial branches separate from those of the lower branches, and of the pyramids, above the nucleus of the motor oculi, and pass separately into the central ganglia.

The electric test gives varying information regarding the localization of intra-cranial disease ; if the contractility of the muscles is lessened, the affection is seated peripherally with respect to the central ganglia ; if not lessened in cases of considerable duration, the disease lies internally with respect to the central ganglia.

12. Hemiplegia with convulsions denotes disease situated centrally with respect to the central ganglia, in the corona radiata or in the hemispheres themselves. Disease of the hemispheres produces paralysis, not preceded by convulsions.

13. Aphasia associatoria, *i. e.*, impairment of speech, with completely or partially retained movement of the tongue, and without loss of the ideas of speech, denotes a disease of the region of the claustrum, which, according to Betz, has in its posterior part a central ganglion for the hypoglossus.

14. Hemiplegia, with convulsions and asphasia associatoria, denotes disease of the frontal lobes in the neighborhood of the convolutions of the island of Reil.

15. Hemiplegia with convulsions and bilateral neuro-retinitis denotes a disease of the portions of the hemisphere lying above the thalamus opticus, and perhaps above the corpus quadrigeminum.

16. Cerebral convulsions without paralytic complications are to be located towards the occipital lobes.

17. Psychical symptoms always denote a primary or secondary affection of the hemispheres of the brain or its membranes. Motor-psychical disturbance, and mania in general, is to be located chiefly in the anterior part of the brain ; disease with symptoms of changed disposition, in the posterior half. (Schroder van der Kolk.)

This is true only of the purely psychical symptoms; most of the symptoms of dementia paralytica are to be located otherwise.

18. Static vertigo, *i. e.*, an impulse to move to one side, is a cerebellar symptom in the broader sense, namely, referable to the cerebellum, and its prolongations into the stem of the brain.

19. Symptoms of motor irritation, in diseases of the central nervous system, are not independent symptoms belonging to the motor system, in Bell's sense, but are essentially connected with the associated action of neighboring organs (posterior columns, lateral columns, cerebellum in the widest sense of the word, hemispheres of the brain, etc.)

In regard to tetanus, the spinal forms of contracture, and paralysis agitans, this is unquestionably true, and even in

peripheral forms of spasm (as tic convulsif) the excito-motor point of origin may often be demonstrated. But all forms of spasm, as we see, are essentially related to stimulation of the volition, or to peripheral irritation acting through the cord. We shall return to this law in the chapter upon spasms and reflex neuroses (reflex spasms.) Tremor, also, in paralysis agitans, or in diffuse sclerosis of the central nervous system, or in purely spinal groups of symptoms (indicative of sclerosis of the lateral columns), is subordinate to the influence of the stimulus of the will on the one hand, and of spinal reflex irritations on the other. A restriction of the seat of symptomatic tremor is therefore not permissible. As a general principle it may be stated that—

20. The influence which stimulation of the sensorium exercises upon a symptom of motor irritation, and in general upon a pathological motor phenomenon, does not prove that the symptom is cerebral; and, in general, motor irritations due to central causes are essentially connected with irritation, or at least co-operation of the sensitive and sensorial portion of the nervous system.

A large group of motor disturbances is caused, not by disease of the motor organs, in the sense of Bell, but by disease of portions of the nervous system, ranking as motor organs, lying in lateral juxtaposition.

I was the first to introduce into pathology the principle that tabetic disturbances of motility are caused by such a regulative nervous apparatus; and through the labors of Cyon this thought has since become known to every one. The cerebellum, also, is such a regulative apparatus, the proper function of which is not yet well known, but which certainly exercises an exciting or a depressing influence upon the functional capacity of the motor nervous structures; motor adynamia is a constant symptom of severe diseases of the cerebellum, especially of its hemispheres. We see, further, that patients suffering from cerebellar diseases are either actually forced to move towards one side, owing (I suppose) chiefly to unilateral spasms or paralysis of the muscles of the trunk, or, at least, that they experience a sensation of being thus forced towards that side, which may be explained by supposing an involuntary increase and diminution of the functional capacity of the trunk muscles of one side, whereby the muscular consciousness in respect to the balance of the body is disturbed.

We also see convulsions originating in diseases of the hemispheres; and in the experiments of Hitzig and Fritsch

we see disturbances of association of movement connected neither with spasm nor with paralysis. The corpora quadrigemina, also, with their peripheral prolongations the two lemnisci, which disappear in the so-called motor field, seem to play an analogous part in movement, that is, they seem to exercise a stimulant influence which maintains the normal function in due vigor, or exaggerates it spasmodically, or (if they are paralyzed) disturbs the motor equilibrium in some way as yet unknown. I suspect that chronic inflammation of the corpora quadrigemina causes paralysis agitans.

As for the localization of associated movements, properly so called, such, for instance, as occur in chorea major in consequence of pathological irritation of parts of the brain, it should be remarked that these parts possess the same dignity as regulative of these movements which the claustrum possesses in relation to speech, and that we, therefore, have reason from analogy to refer associated movements to the central ganglia. In favor of this view we have the anatomical fact, discovered by Betz, that all the central ganglia—thalamus opticus, corpus striatum, corpus quadrigeminum, nucleus lenticularis, claustrum, nucleus amygdalæ—form one connected gray mass, whence we may infer that the whole mass possesses analogous functions, and constitutes the centre for associated movements. The claustrum is known to be a centre of association for speech, and the corpus quadrigeminum for the muscles of the eye.

Having now explained what central symptoms admit of a definite localization, and of what sort this localization is, the significance of the "law of diffusion," stated in the beginning, becomes at once clear. Since the days of Bell and Romberg a tendency has prevailed, in the whole of nervous pathology, to concentrate all the existing groups of symptoms in a given case of disease upon one spot or region. I will only allude to the attempts of Remak to localize the various forms of tabes according to their complications.

In dementia paralytica the case is much more striking. Meynert was obliged to derive all the symptoms from a disease of the frontal lobe, which he found atrophied to a greater extent than the posterior regions; but Westphal, on the contrary, saw in the alterations of the spinal cord the most important anatomical phenomenon. If we analyze the phenomena of dementia paralytica under the guidance of the law of diffusion, we shall adopt neither of these alternatives, but shall first of all fix every symptom that

admits of localization; and thus we shall reach the conclusion that dementia paralytica is a diffused disease, extending over the entire nervous system. We shall refer tabetic symptoms to the posterior columns of the cord; alalia, difficulty in swallowing, and other symptoms of progressive paralysis, to the nuclear region of the stem of the brain; hemiplegia with convulsions, or convulsions simply, to the hemispheres of the brain; conditions of motor excitability to the frontal lobes; certain irregular disturbances of the character of those discovered by Hitzig and Fritsch, also to the anterior lobes.

Pathological anatomy completely justifies this view, although we must say that there are many other phenomena in dementia paralytica, the localization of which is impossible at present, or at least rests on an uncertain basis; for instance, those undefined disturbances of motility, as when the patient never moves of his own accord, but can walk very well if urged to do so. This phenomenon is evidently a result of impaired energy, of innervation of the centres of volition. In many cases, too, there is a symptomatic hastiness and a spastic quality, without any proper spasm, in the movements of many insane persons which cannot be exactly localized. Many of these disturbances might, perhaps, be ascribed to disease of the central ganglia on the one hand, and of the anterior lobes on the other.

The law of diffusion is extremely useful in the so-called *sclerose en plaques*. The attempt has been made to associate a definite group of symptoms with this affection, but every new case has brought new complications. The cause is very clear; the symptoms do not depend on anything special in the form of the disease, but upon the localities that are affected; while, on the other hand, it is plain that there exists a certain law regulating the diffusion of the disease, in obedience to which it leaps from one place to another, and thus gives rise to certain unitary groups of symptoms, amongst the great variety of forms which diffuse neuritis assumes.

It is an unquestionable fact, established in recent times, that our methods of preparation and study of anatomical specimens allow us to neglect a great many diseased regions, which has occasioned great confusion, all the symptoms being referred to the seats of disease which happen to be discovered. The law of diffusion will guard against such errors. For example: when the predominant symptoms have been spinal, associated with alalic

disturbances of speech, we shall not content ourselves with the discovery of spinal disease, but will examine closely, by the aid of the microscope, into the condition of the hypoglossus and its nuclei ; and in time to come the alienist will do the same when examining the symptoms of alalia, etc., in the insane.

We know now that the designation of *sclerose en plaques* is incorrect, for the researches of Bourneville have proved that the disease is not limited precisely to local foci, but that the spaces between the foci, apparently sound, are really diseased. We have properly a diffused neuritis, which (as far as concerns spinal symptoms) derives its character from the combination of disease of the anterior and of the lateral columns. The expression, *sclerose en plaques* may, therefore, be retained as clinically useful ; or we may call it, instead, Charcot's type of diffuse central neuritis.

Diffuse neuritis includes also the ascending and the descending form of dementia—the combinations of ascending tabes with dementia (type of Jeffe-Westphal) — the combination of glosso-labio-laryngeal paralysis with progressive muscular atrophy and paraplegia of the arms (type of Wachsmuth)—the combination of general progressive muscular atrophy with the above-named disease of the region of the nuclei of the cerebral nerves, without atrophy, and also the cerebral *sclerose en plaques* (type of Valentiner), etc.

Among the groups of symptoms which occur in general neuroses, especially hysteria and dementia, may be classed Basedow's disease, which belongs, in all probability, in the region of the junction of the spinal cord and medulla oblongata.

It would be of great importance to establish the law regulating the diffusion of central neuritis. Much may depend on the distribution of the blood-vessels ; and the memoir of Duret upon the distribution of the vessels of the medulla oblongata (Archives de Physiol., 1873) gives us interesting facts in this respect. The gist of the matter, however, seems to me to lie in quite another point. I will not speak at length here, owing to want of material.

In the spinal cord, observation indicates a prevailing tendency to spread upward and downward, and rarely to extend to the deeper portions of the cord, when the disease is chronic and progressive.

In conclusion, I will remark that diffuse central neuritis can seldom be confounded with diffused neoplasms, from

the fact that the local extension of neoplasms follows entirely different laws from those which govern the diffusion of chronic inflammations. Purely tabetic symptoms, taken for example, could never be produced by a neoplasm.

But from my own experience, and from what I gather in reading, it appears to me that a neoplasm, as well as local neuritis, may give origin to a diffuse central neuritis, even at remote points; so that the diagnosis of a diffuse process, even when located in separate regions, with intervals of sound tissue, will not absolutely exclude the possibility of a neoplasm.

The importance of the law of diffusion, both in a diagnostic and in a therapeutic point of view, is shown by the following consideration: Chronic nervous diseases frequently give rise to cerebral and spinal symptoms, of which each must be treated, as far as possible, *in loco morbi;* this has been so far neglected, that when cerebral symptoms have been present, it has been usual to treat them alone, to the neglect of the spinal. On the other hand, it used to appear most paradoxical to me, when I first observed the improvement in mental symptoms, deafness, and amblyopia which occurred during the employment of galvanic currents applied to the vertebral column. When we consider that in the progressive ascending form of dementia paralytica the process may leap across from the cervical enlargement on the stem of the brain to the cerebral hemispheres, as is quite certainly the case in the neuritis of the optic and auditory nerves in tabes, we shall admit that some irritation or paralysis (for example, within the cervical enlargement) acts as a cause of this leaping across; and we shall be prepared to understand that the sedative or stimulating action of the galvanic current upon the cervical enlargement may arrest or cure the symptoms of remote secondary irritation. There is no doubt that in the case of these symptoms, the laws governing their diffusion have an anatomical basis, and a relation to the reflex functions of the vaso-motor system; though we know very little of such a basis or such relations. It is a very interesting fact that in chronic inflammation of the anterior half of the cord the process never leaps over to the cerebral nerves; if this seems to be the case, it arises from the presence of associated disease of the posterior columns, the symptoms of which are overshadowed by the more prominent ones referred to the anterior half.—*Psychological and Medico-Legal Journal.*

Poisoning by Mushrooms.

BY N. S. DAVIS, M.D.

On the afternoon of September 17th, 1874, a young man, attending the North-Western University, while out with two of his classmates gathering botanical specimens, plucked and ate mushrooms which he supposed to be edible. He had previously during the same afternoon eaten some sour grapes. They returned to their boarding place, and while at the supper table the one who had eaten the mushroom began to be very sick. He had hardly more than time to leave the table when he began to vomit violently, with extreme distress in the epigastrium. The contents of the stomach were fully ejected, but paroxysms of vomiting and distress continued with great severity for three hours, during which he had some cramps in the muscles of the legs, occasional hiccough, skin and extremities cool, respiration twenty per minute, pulse one hundred, and extremely small and weak. After about three hours the bowels began to move, and he had, at intervals of half an hour, two or three copious serous discharges from the alimentary canal. These discharges were sufficient to fill a chamber vessel two-thirds full, were very thin and plainly tinged with blood; yet the pains in the abdomen were not very severe. Each intestinal evacuation was preceded and accompanied by severe cramps in the calves of the legs, and increased feebleness of the circulation, but the nausea and vomiting diminished. About six hours after the commencement of the attack all active evacuations ceased, and the patient began to have some sleep. During the last half of the night his stomach and bowels remained quiet, and a moderate febrile re-action took place; yet, there was no stupor, no abdominal distension, and but little tenderness on pressure. He continued to have some redness and heat of skin, accompanied by moderate fullness of the pulse, slight dilatation of the pupils, dull headache, and a sense of giddiness on assuming an erect position, all the next day. These symptoms passed away and he slept well the following night. The stomach exhibited slight morbid sensibility, with a feeling of general weakness for three or four days, when his recovery appeared to be complete.

I saw him in half an hour after the first active symptoms commenced. Learning that he had already vomited enough

to fully evacuate the contents of the stomach, and that it had only been about two hours since he ate the *fungus*, I did not deem it necessary to give either emetics or cathartics, but required entire rest in the recumbent position, and to allay the extreme irritation of the gastric mucous membrane, gave him a teaspoonful of the following mixture every half hour:

℞ Carbolic Acid cryst. 8grs.
Glycerine, ʒ ss.
Camph. Tinct. Opii., ʒ ij.
Aqua Camph. ʒ ij.
Simple syrup, ʒ ss.
Mix.

After the bowels began to move and the pulse became very feeble he was ordered two tablespoonfuls of warm strong coffee between the doses of medicine.

These were all the remedies given, and how far they exerted any influence we leave every reader to judge for himself.

My object in placing this case on record is that it differs in several respects from the majority of cases of mushroom poisoning.

1st. The symptoms of irritation in this case commenced actively in two hours after the *fungus* was eaten, which is much sooner than in most of the cases on record.

2d. The symptoms were more than those of a purely irritant poison, acting directly on the mucous membrane of the stomach and bowels, while in most of the recorded cases symptoms of narcotism, such as stupor, delirium, etc., are prominent symptoms.

Since writing the above case, we learn that only a few days since two boys, at Oak Park, gathered what they supposed to be edible mushrooms, and caused the servant girl to cook them and participate in eating the same. They were all soon taken sick, and one of the boys, named Palmer Kellogg, twelve years of age, died. The other two are in a fair way to recover. We have not learned the particular symptoms exhibited in these cases.

A newspaper, in alluding to these cases, says the boys "picked a lot of *toadstools*, thinking they were *mushrooms*." It is proper to state that there is no reliable and easily recognized difference between *toadstools* or poisonous or non-poisonous mushrooms, and the only safe way is to let all these fungi alone.

Gynecology and Diseases of Children.

Case of Uterine Fibroid Treated by Hypodermic Ergotine.

BY GEORGE COWAN, M.D., DANVILLE, KY.

On the 9th day of November last M. C., a colored woman, married, and aged about forty years, presented herself to me at my office for treatment of a fibroid tumor of the uterus. She had noticed its origin eight years previously in the left side of the hypogastrium. Her previous health was good, although she had been sterile all her life. There have been no attacks of metrorrhagia, but has had a few tolerably profuse menorrhagias. There has been during the last four years very obstinate constipation, and it has been lately a very difficult matter to secure a movement from the bowels, although very powerful purgatives and enematæ were used. There have been also uterine tenesmus, swelling of the feet, and pains and numbness in the right leg and side. With these rational signs, and by the employment of the aspirator, Simpson's intra-uterine sound, and bimanual manipulation through the rectum and vagina, a diagnosis of a subperitoneal fibroid growth of great size and density was arrived at. At the most prominent point of the abdomen, which was two or three inches above the umbilicus, she measured thirty-six inches transversely around the body. The shape of the abdomen was nearly symmetrical, and the abdominal walls seemed stretched to their utmost. The surface presented a smooth, uniform appearance, and no pressure could develop anything like sulci or prominences. The uterus seemed one uniformly hypertrophied mass of almost stony hardness to the touch. The cavity of the uterus could be explored four and a half inches with the sound. Not regarding the operation of gastrotomy as ever justifiable in such cases, and knowing of the method instituted by Hildebrandt of using ergotine hypodermically, I resolved to try it. I accordingly injected into the subcutaneous tissue of the abdomen daily for two weeks one and a half to two grains of ergotine in twenty minims of distilled water. At the end of this time the patient returned to her home, where it was too far distant for me to visit her and keep up the treatment.

The results of the treatment in two weeks' time were as follows: The greatest circumference of the abdomen was reduced to twenty-eight and a half inches; the bowels had acted daily for several days, freely and without the use of medicine; the abdominal walls greatly relaxed, and the presence of several instead of a single tumor detected; and the patient much improved in health, strength, and spirits. She supplied herself with a hypodermic syringe and a solution of ergotine, and I taught her as well as I could the proper use of the instrument. Such frequent and painful abscesses ensued, however, as to require her to abandon its use. The tumor began to enlarge, and her health gradually gave way again.

I visited her, at her urgent request, at her home on the 16th of last March, and found her condition wretched and helpless indeed. Her flesh and strength were now so greatly reduced that she was confined to her bed, her bowels obstinately constipated, and the transverse measurement around the abdomen at the most prominent point thirty-two inches. After several ineffectual efforts to get the treatment properly executed at her home, she returned to Danville for treatment on the 31st of last May, since which time she has been under treatment as before, the dose of the ergotine having been gradually increased to three grains. Her present condition is again very greatly improved. Her appetite and strength are nearly entirely restored, and the bowels are acting daily and freely, and the measurement at the point above indicated has been reduced to twenty-seven and a quarter inches. One symptom, the common enlargement of the abdomen at the menstrual period, has been very marked. At the menstrual epochs she measures from two and a half to three inches more around the abdomen than at other times. Query: may not this symptom be regarded as possessing some value in making out a diagnosis between uterine fibroids and ovarian tumors?—*American Practitioner.*

Amputation of the Uterus and Vagina.

EDITOR MEDICAL AND SURGICAL REPORTER.—Mrs. N., æt. 25 years, mother of four children, was confined March 4th, 1874, and gave birth to a full grown child at full term of her pregnancy. She was attended by a midwife in her confinement, who extracted the placenta by making strong

traction on the cord. The placenta was adherent to the walls of the womb, and this led to complete inversion of the uterus and vagina. The midwife wished to conceal the mischief she had done from the patient and her friends, or else did not know really what had occurred, so the woman remained in that condition till the end of two weeks, at which time I was summoned to see her. On examination I found the womb completely inverted, very much inflamed and swollen, with a dark spot on the fundus about the size of a silver dollar; her pulse was 120 beats to the minute; she was very restless and haggard, with anxious expression of countenance. I had Drs. Stephenson and Brown sent for, and on a thorough examination of the case it was agreed to amputate the parts, as the only means of relief for the patient, as evidently gangrene had set up in the fundus of the uterus, and if reduction were practicable, we could not expect recovery under the existing circumstances. Suffice it to say that all necessary arrangements were made, and the patient was placed in the position for the operation of lithotomy. She was fully placed under the influence of chloroform by Dr. S., while I commenced making an incision with a scalpel on the left side, down to the vaginal arteries; a sponge was then applied with Monsell's solution. I then took up both arteries and ligated them, and with a needle and thread stitched up the incision, after arresting the hemorrhage. The other side was treated in the same manner. I then secured the parts entirely, and returned the remaining portion of the vagina back, and washed the parts out clean with a solution of sugar of lead and tannin. Meantime the patient was roused and given a little brandy, which she threw up in a few minutes. A mustard plaster was applied to her stomach, and a little more brandy given her, which she retained. A full dose of opium was administered, and the patient put to bed. A pledget of lint saturated with creosote and glycerine were placed in the vagina and retained by a T bandage, which was let remain twenty-four hours, when it was removed and the parts washed clean and a new application made. One grain of opium was ordered every six hours, with port wine every two hours.

This course was continued for one week, at the end of which time all her symptoms seemed to be improving. I then ordered a wash of the permanganate of potassa twice a day, which was continued one week longer. At the end of that time I ordered a wash of nothing but lukewarm

water, and at the end of one month's time, strange to say, the patient was able to walk about her room, and at the present writing is entirely well, and enjoying as good health apparently as she ever did.

E. G. BRADLEY, M.D.

On the Condition of the Mouth and Teeth During Pregnancy.

BY MR. OAKLEY COLES.

MR. PRESIDENT AND GENTLEMEN—There is an old-fashioned phrase, common amongst a large section of the female community—"for every child a tooth."

I believe that the accuracy of the statement contained in this old woman's fable may be fairly doubted, but it is nevertheless true, that the period of pregnancy is one in which the oral secretions are subject to considerable alterations, whilst the teeth are peculiarly liable at this time to decay, or to undergo pathological changes.

In the artificial life of the present day, the teeth are less able to resist the strain made upon them, in common with the other parts of the organism; hence we have during pregnancy an increasing liability to caries with each generation.

I propose in the following paper noticing—

1. The changes and general condition of the teeth during pregnancy.
2. The condition of the gums.
3. The oral secretions, with their changes and influence upon the teeth.
4. The neuralgia of pregnancy.

And lastly, the remedial agents useful during pregnancy.—*Missouri Journal.*

ACTION OF ERGOT ON THE INFANT.—Dr. E. R. Herschel, in the New York *Medical Record*, says a new-born infant, by accident, received half a teaspoonful (thirty drops) of Squibb's fluid extract of ergot. Efforts to vomit the infant failed. In an hour it was seized with severe abdominal pains, recurring every fifteen minutes, and lasting

about one minute. Slight tetanic contractions of the face and extremities were present, and four hours subsequently a diarrhœa set in. All the symptoms yielded to hot baths in twelve hours, though for two weeks there was a tendency to diarrhœa. This supports the opinion that ergot does not cause the death of the child during labor.

NEW ANTIDYSENTERIC.—In the Vienna Exhibition are shown specimens of an "antidysenteric extract" prepared from the pods of the mangosteen (Garcinia mangostana), a well-known plant in the East Indies. The extract has been prepared by Herr Gruppe of Manilla, and has been used in a large number of cases in hospital and private practice. It is said to be a trustworthy remedy in dysentery and in chronic diarrhœa, as well as in catarrhal disorders of the uterus, bladder, and urethra, and generally in diseases for which astringents are indicated. It may be given in pills, or, especially to children, in the form of syrup.

ENEMATA OF BROMIDE OF POTASSIUM IN OBSTINATE VOMITING.—Dr. Girabetti has obtained the very best results from the administration of enemeta of bromide of potassium, in doses of from one-half to two drachms, in cases of obstinate vomiting attending the pregnant state. The same drug, also administered in enemeta, has been very successful in the hands of Dr. Laborde, of Paris, in obstinate vomiting, connected with disease of the stomach, liver and intestines.—*Lancet*, May 30th, 1874.

HÆMORRHOIDS.—Dr. Wm. Colles, Dublin, lately injected twenty minims of tincture of perchloride of iron into each internal hæmorrhoidal tumor. No traces could be found some weeks afterward, by speculum, except nodules, of the size of shrivelled currants. The case had resisted Dr. Houston's application of fuming nitric acid.—*British Medical Journal*, June 27th, 1874, p. 849.

AGREEABLE PURGATIVE.—

℞. Magnesiæ calcinat, ʒiss.;
Aqæ puræ, ℥ ij.;
Sprup. orgeat (or curacoa) ℥ss. M.

Public Health and Vital Statistics.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during July, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	351	33	15	58	2	27	15	S. F. B'd of Health.
Sacramento	24	3	2	4	0	0	1	Sac. B'd of Health.
Petaluma	5	1	0	1	0	0	0	Dr. G. W. Graves.
Dixon	0	0	0	0	0	0	0	Dr. A. H. Pratt.
Stockton	11	0	0	2	0	4	0	Stockton B'd Health.
Marysville	9	0	1	0	0	0	1	Dr. A. B. Caldwell.
Placerville	1	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	...	..	..	..	..	..	.	Dr. T. C. Stockton.
Oroville	7	0	0	0	0	0	1	Dr. J. M. Vance.
Los Angeles	37	2	0	0	0	4	0	Dr. H. S. Orme.
Truckee	0	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	0	0	0	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	1	0	0	0	0	0	0	Dr. M. B. Pond.
Watsonville	5	0	0	2	0	0	0	Dr. W. W. Ross.
Folsom	1	0	0	1	0	0	0	Dr. S. Lyons.
Santa Cruz	...	..	..	..	..	..	.	Dr. C. L. Anderson.
Suisun, Fairfield	1	0	0	1	0	0	0	Dr. S. D. Campbell.
Colusa	6	1	0	1	0	0	2	Dr. Luke Robinson.
Trinity County	...	..	..	..	..	..	.	Dr. J. C. Montague.
Santa Barbara	7	2	0	0	0	0	0	Dr. C. B. Bates.
Redwood City and sur.	4	0	0	0	0	0	1	Dr. C. A. Kirkpatrick.
San Andreas	1	0	0	1	0	0	0	Dr. C. B. Robertson.
Auburn	...	..	..	..	..	..	.	Dr. A. S. Dubois.
Tulare County	...	..	..	..	..	..	.	Dr. M. Baker.
Siskiyou County	4	0	0	0	0	0	0	Dr. Daniel Ream.
Susanville and sur.	3	0	0	1	0	0	0	Dr. J. J. Sawyer.
Downieville	3	0	0	1	0	0	0	Dr. Alemby Jump.
Healdsburg	...	..	..	..	..	..	.	Dr. J. Bradford Cox.
Michigan Bluffs	...	..	..	..	..	..	.	Dr. J. L. Jackson.
Pajaro	1	0	0	0	0	0	1	Dr. Nichols.
Sierra City	0	0	0	0	0	0	0	Dr. L. F. Jones.
Oakland	29	..	..	..	..	..	.	Board of Health.
Antioch	0	0	0	0	0	0	0	Dr. M. C. Parkison.
Salinas and sur.	6	1	1	1	0	0	1	Dr. W. W. Davies.
Woodbridge and sur.	1	0	0	1	0	0	0	Dr. A. Trafton.
Cloverdale and sur	3	1	0	0	0	0	0	Dr. Q. C. Smith.

Remarks.—Our table presents no striking features, calling for special comment, except it be the steady decline in

the mortality by scarlatina in San Francisco and Stockton, and the considerable increase by diseases of the digestive organs; of which cholera infantum constituted thirty-four in San Francisco. It will be seen that the great mortality noted last month in Los Angeles is still greater at present. We have been promised completer reports hereafter, which may explain the causes. The unusual number of deaths in Oroville is attributable to much sickness among the Chinese, six out of the seven deaths there being from among this class of our population.

THOMAS M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

SEA SICKNESS.—The opinion so commonly held in regard to sea sickness, namely, that it is due either to a congestion of the brain or to a commotion in the abdominal viscera, caused by the motion of the vessel, is very plausibly combatted by M. Pellerin, who, in a paper read before the French Academy, attributes the malady to a deranged circulation of the blood, produced by the alternate rolling and heaving of the vessel. The result of this, he says, is not a congestion of the brain, which is, on the contrary, deprived of some of the blood required to keep up a stimulus of that nervous center, that sensation which is felt in sea sickness resembling peculiarly what is felt immediately after a letting of the blood when the patient sits or stands, namely, a disposition to vomit, or actual vomiting. In support of this opinion, mention is made of the fact that persons who are liable to sea sickness experience its effects in a much slighter degree when they are in a horizontal position, the relief thus afforded being like that which is produced in the same position when a person is in a state of syncope.

LEMON JUICE IN DIPHTHERIA.—M. Revillout recommends (*Gazette des Hopitaux*, June 20th,) in the strongest terms the employment of large quantities of pure lemon juice as a gargle. He says that he and his father have used it during eighteen years and always with success, it being the most certain application yet known.—*Medical Times and Gazette*, June 27th, 1874.

Monthly Report of Deaths Registered in San Francisco during September, 1874.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	....	....	....	...	....	...	..	....	....	....	....	....	....
Measles	....	....	....	....	....	....	..	...	....	...	....	....	....
Scarlatina	19	....	11	7	1	....	..	9	10	15	2	....	2
Diphtheria	3	....	1	2	....	....	..	1	2	3	....	....	....
Croup	1	....	1	....	....	....	..	....	1	1	....	....	....
Whooping Cough	1	....	1	....	....	....	..	1	....	1	....	....	....
Typhus and Typhoid Fevers	13	....	1	4	8	....	..	6	7	3	5	....	5
Diarrhœa and Dysentery	10	....	3	6	1	....	..	9	1	3	2	....	5
Cholera Infantum	15	....	15	....	....	....	..	5	10	14	1	....	....
Cholera Morbus	1	....	....	....	....	1	..	1	....	....	....	....	1
Pyemia and Septicœma	3	....	....	1	1	1	..	2	1	1	....	....	2
Cerebro-Spinal Meningitis	3	....	3	....	....	....	..	2	1	3	....	....	....
Syphilis	3	....	....	....	3	....	..	1	2	....	1	....	2
Alcoholism	5	....	....	....	4	....	1	3	2	1	....	....	4
2—Cancer	7	....	....	....	4	2	1	5	2	....	1	....	6
Phthisis Pulmonalis	44	....	3	2	33	6	..	31	13	3	12	5	24
Hydrocephalus & Tubercular Meningitis	5	....	5	....	....	....	..	3	2	5	....	....	....
3—Encephalitis	7	....	4	....	2	1	..	4	3	4	2	....	1
Apoplexy and Paralysis	7	....	....	....	4	3	..	5	2	....	1	....	5
Convulsions	13	....	12	....	1	....	..	10	3	13	....	....	....
Other Diseases of the Nervous System	7	....	2	2	2	1	..	4	3	3	1	....	3
Aneurism	7	....	....	....	4	3	..	7	....	....	....	....	6
Diseases of the Heart	8	....	....	1	4	2	1	7	1	....	2	....	5
Pneumonia	13	....	3	....	7	2	1	10	3	3	4	....	6
Bronchitis	4	....	1	....	2	1	..	2	2	1	2	....	1
Other Diseases of the Respiratory Organs	6	....	3	....	3	....	..	4	2	3	1	....	2
Diseases of the Stomach and Bowels	13	....	6	....	6	1	..	11	2	6	....	....	7
Diseases of the Liver	7	....	....	1	5	1	..	3	4	1	....	....	6
Bright's Disease and Nephritis	2	....	....	....	2	....	..	2	....	....	....	....	2
4—Puerperal Diseases	5	....	....	....	5	....	..	....	5	....	1	....	4
Atrophy and Inanition and Old Age	31	....	24	1	....	2	4	18	13	24	4	....	3
5—Suicides	7	....	...	....	5	2	..	7	....	....	4	....	3
Deaths in Institutions	63	....	8	2	40	11	2	48	15	8	12	....	43
Still-Births	....	....	....	....	....	....	..	10	7	....	....	....	....
1—Zymotic Diseases	81	25.6	36	15	25	3	2	44	37	45	13	....	23
2—Constitutional Diseases	60	18.9	11	2	38	8	1	40	20	11	13	5	31
3—Local Diseases	98	30.9	30	5	44	17	2	71	27	33	13	....	49
4—Developmental Diseases	43	13.6	31	1	5	2	4	23	20	31	5	....	7
5—Deaths from Violence	14	4.4	1	1	10	2	..	12	2	2	6	....	6
Deaths from Unknown Causes } Chinese	21	6.6	....	1	19	1	..	20	1	....	....	21	....
Deaths from Unknown Causes } Others	....	.....	....	....	....	....	..	....	....	....	....	....	....
Total	317	.....	109	25	141	33	9	200	107	122	50	26	116
Per Cent. to Total Mortality	....	100.00	34.4	7.9	44.5	10.4	2.8	66.2	33.8	38.5	15.8	8.2	36.6

HENRY GIBBONS, Jr., M. D.,
Health Officer.

The State Board of Health.

The Board met, pursuant to law, at Sacramento, October 21st, at the office of the Permanent Secretary, Dr. Logan.

Present: Dr. Gibbons, Sr., President; Drs. Todd of Stockton, Montgomery of Sacramento, and Stout of San Francisco.

The minutes of last quarterly meeting were read and approved.

In the matter of the Solano County Hospital, the details of which were related in a former number of the LANCET, the inquiry was made, if, in accord with the liberality manifested by the Supervisors of Solano County, the hospital had been built — three months were thought sufficient to erect the proposed pavilion hospital? The discouraging answer was, No. It appears the five Supervisors are two for Fairfield, two for Dixon, one for Vallejo. Now, Fairfield offered a lot, if the hospital be located there; Dixon bid a lot to have the pavilion decorate its site; Vallejo seems not to have cared, and offered nothing. On the vote, Fairfield voted for Fairfield, and Dixon for Dixon. Vallejo told them to settle their own disputes, sat as witness and refused to vote. Hence the patients in the delectable hospital of Fairfield as heretofore pictured, abide the result. Any other town in the county than Fairfield, Dixon or Vallejo ought to get the preference, though if in pure rivalry one from Fairfield and one from Dixon would go over to Vallejo, the railroad metropolis of Solano might win the race. Stock in hospitals is in demand; rise, Benicia, and seize the prize.

Several communications were received and recorded for further report.

Dr. Montgomery introduced the question of the culture of the eucalyptus tree in California. Its value as a disinfectant against malaria was fully discussed, but referred to future more ample investigation. But there was no dissent upon the value and usefulness of the tree for hygienic, utilitarian and ornamental purposes. As such, for boundary

lines, for avenues, for groves in the vicinity of towns, for shade around the innumerable residences scattered over our treeless plains and prairies; for economic uses, as fences, firewood, railroad ties, etc., this tree is of inestimable value to the State. The propriety of creating such groves on the grounds of the Napa Insane Asylum, in whose shade its convalescing invalids might loiter, was suggested, as only a few of the gorgeous oaks of Napa are on the premises.

Hygiene.

The necessity of pure water for the enjoyment of good health is manifest, and needs no discussion. In the Second Biennial Report of the State Board of Health, 1871–73, we called attention to the insalubrity of the water contained in the tanks on the tops of houses in San Francisco, and now refer the reader to that work for other matters pertaining to the same subject. For the purification of such waters, we cheerfully give place to Mr. P. Huerne's interesting pamphlet, which, at our solicitation, he has furnished for distribution with the LANCET. It contains a description of his valuable filter, and also plates of the monsters and reptiles, when magnified, which render the water decidedly nutritious and life-sustaining. With a filter to *clarify* and charcoal to *purify*, these vermin may be separated. Appended are also Mr. Huerne's remarks on the use of charcoal as a disinfectant:

In order to purify the water as well as to clarify it, a charcoal attachment has been added to this filter. Sifted charcoal dust mixed with water is introduced in the cylinder, one tablespoonful for every fifteen gallons of water. The charcoal dust when saturated with the deleterious gases as well as the other impurities are dragged along by the clearing of the filter; so that a perfect cleanness of the apparatus is maintained and the quality of the water so guaranteed. Special models for hotels and factories, also with charcoal; no limit—one million (or more) gallons for twenty-four hours.

Scientific Proceedings.

MICROSCOPICAL SOCIETY.

Interesting Lecture by President Hanks — Donation of Mounted Slides.

The regular meeting of the Society was held on Thursday evening. Mr. William H. Pratt, of Massachusetts, was present as a visitor.

Under the head of donations the Secretary announced the reception of the October number of the *Overland Monthly* from the publishers.

Valuable additions to the cabinet were made. Mr. H. Edwards presented several specimens of the "honey ant," from New Mexico.

Mr. Pratt donated three slides, mounted by him, being a portion of elytron of green tiger beetle; anther and pollen of morning glory, with peculiar spiny outer coat and pollen of the passion flower.

Mr. Charles Purdy presented through Mr. Kinne, a curious formation of calcareous sandstone, worn by the winds, from Castle Peak, Mono County, and also an exceedingly rare specimen of Oolite, from the border of a hot spring in Bridgeport. Mono County.

Mr. C. Mason Kinnie donated a large number of slides, mounted by him, which were examined during the evening, consisting of the scales of moth; Tracheæ of Larva; Pollen of Chinese Arbutilon; siliceous spiculæ of sponge; sand from Salt Lake; minute shells from the Sandwich Islands; wing of butterfly; section of coffee Arabica, and section of Frangula Californica. A wide difference in the cell structure of the last two named was noticeable, giving additional testimony to the fallacy of regarding the "so called coffee" as akin to the real article.

Mrs. E. D. Wallace presented the society with a sample of the mildew, or mould, which forms in wine vaults on the London docks, and which Dickens mentions in "No Thoroughfare" as having a superstition attached to it, that if it falls, of its own accord, on any person, they will die a violent death.

Mr. Hanks' lecture on "Polarized Light" received the attention of all present, and while he claimed no originality as to the facts, his method of explanation of this most

wonderful peculiarity of light, in connection with certain mediums, certainly deserved the interest manifested.

Through the kindness of Mr. Treadwell, who placed his apparatus at the disposal of the President, Mr. Hanks was enabled to show the members some very interesting experiments with the double image prism, and the effect of polarized light on various crystals.

Starting out with a general statement of the laws which govern the transmission of light, aided by frequent diagrams on the blackboard, he gradually approached the phenomena in question, and fully explained what has been deduced from the study of others, as to the causes which produce polarization.

The effects he was enabled to show with the selenite plates, with blue tourmaline and crystals of quartz and nitre, in the way of colored rings, crones and bands, were beautiful in the extreme, and he fully explained what was meant when he stated that many substances present a different appearance when viewed under the influence of polarised light, and may be thus distinguished from similar substances which do not, and it is therefore of the greatest importance to the microscopist, the chemist, the mineralogist and the general observer. An object, which under the influence of ordinary light is tame and uninteresting, when viewed by polarized light flashes into new beauty and reveals an interior structure before unsuspected. Some substances, otherwise transparent, become opaque, while others develop brilliant colors or show black rings, stars and crosses. Many of the phenomena of sunset, the fringing of the clouds and the warm tints of a landscape are in some measure owing to polarized light.—*Alta*, October 3d.

MICROSCOPICAL SOCIETY.

Donation of Mounted Objects—Exhibition Illustrating Histology, by Dr. Harkness.

The stated meeting of this Society was held on Thursday evening at their rooms, President Hanks in the chair.

In addition to a large number of members, Messrs. W. R. Barbour, W. M. Lockington and L. F. Henderson were present as visitors.

Mr. W. H. Pratt was elected a corresponding member of the Society.

Under the head of donations, Mr. Hanks presented a slide mounted with a fragment of brick, from the arch or roof of a furnace in which gold sulphurets were roasted, in Calaveras county. The surface was covered with gold, which, under the microscope, presents interesting peculiarities.

Mr. Kinne presented several slides, mounted by him, embracing the following objects: pollen of Periwinkle, exhibiting their peculiar silt-like markings; foraminated encrustations on berries of Fuca Navalis, found in the Gulf Stream; hairs of caterpillar, the larva of Spilosoma Acrea, showing minute spines arranged on the main shaft in somewhat regular whorls; sections of cypress, both transverse and longitudinal, showing the characteristic dotted ducts.

Mr. Edwards presented several fragments of insects for mounting, from Japan. Dr. Blake presented a species of Coccus, found in the leaves of the growing Fuscia.

Dr. Cooper presented a variety of fungoid growth, found on willows, which was referred to Dr. Harkness for further examination.

Dr. Harkness exhibited the Achyla Prolifera, a fungoid growth found on the bodies of dead flies, and gave a very interesting account of its method of growth. Some very fine specimens of Closterium were shown, which are found abundantly in the bottom of pools, on any sunny day, at the present time, and which illustrated very beautifully cell rotation. Another form of vegetable life the Gonium Pectorale, revolving across the field with a life-like motion, taken in connection with the Euglena, classed as a genus of Infusoria, and found in the same drop of water, served, with several forms of life referred to by Dr. Bastian in his experiments on the "Beginning of Life," as a theme for a very interesting evening's study.—*Alta.*

ACADEMY OF SCIENCE.

The Usual Preliminaries—Donations to the Cabinet—New Members—Interesting Papers.

The Academy of Science met, as customary, last evening. Vice-President Gen. Hewston presided.

NEW MEMBERS.

F. Gruber and Geo. T. Bromley were elected members of the Academy.

DONATIONS

To the cabinet were as follows: Specimens of coal from all over this Coast, and from Australia, presented by J. P. Dameron; a section of a geode containing crystals of carbonate of lime, donated by Gen. Colton; wood and fruit of the Osage Orange, from Dr. R. Reid; skates' eggs from W. G. Blunt; walnut wood, from Calaveras river, and quicksilver from Napa county, presented by J. W. Lynch; specimens of dye obtained from the Osage Orange, from C. D. Gibbs; specimens of silver from Arizona and from the Rocky Mountains, and some crystal zinc, from Geo. Purdy; skull of female Indian from a depth of fifteen feet in the clay of San Francisquito creek, from Hunter & Shackleford; two specimens of crustacæ, from Shanghai, by Henry Edwards; a new parasite, from the California orange tree.

WRITTEN COMMUNICATIONS.

J. P. Dameron enlightened the Academy with what he called "An Article on Coal." The paper was not remarkable for anything but its tiresome length, and its author should be careful next time and consult Worcester as good authority in pronunciation. It is bad enough to be compelled to listen to a dissertation composed of "words of learned length and thundering sound," but it is a cruel infliction to positively refuse them their natural right of correct pronunciation.

Dr. W. H. Dall, of the U. S. Coast Survey, who returned last week from a Summer Expedition on the coast of Alaska, etc., read a short paper entitled "Note on Some Aleut Mummies."

Another paper submitted to the Publication Committee, but not read, was on the "Wesh-knot of the Tchin-cha-an Indians, Port Simpson, British Columbia." It describes a very peculiar knot made by the Indians. The knot does not require the passage of the ball of twine through the mesh at any slip in the formation, and therefore obviates the use of the knitting needle.

Dr. Cooper resumed and concluded his paper on the "Tertiary Period of California." The paper was listened to very attentively by the audience.

Dr. Harkness made a verbal report of the examination of the fungoid growth found on willows that had been sent to the Microscopical Society. He gave an illustrated account

of its formation as seen under the glass, and as already described in the *Alta*.

Mr. Lockington gave a very interesting verbal history of many of the crustacæ donated to the Academy at its former session.

Dr. Blake offered brief remarks on the recent thunder and lightning phenomena. He had watched it, and pronounced it the greatest he had ever seen in California. He was in Placerville at the time.

After some remarks from Dr. Dall, on the glacial formations met with in the Aleutian Islands, the meeting adjourned.

Editorial.

Meran and the Grape-Cure.

Meran, the ancient capital of the Tyrol, though it has long since ceded its metropolitan honors to Innsbruck, remains the head-quarters of the grape-cure, and is unrivaled for beauty of situation and charm of climate. It is a sunny, cheerful town, lying on the right bank of the bright and brawling little river Passer.

Apartments and single rooms are hired by the month during the Spring and Autumn, and the prices vary, according to situation, from twelve to forty-five guldens. Living at Meran is decidedly cheaper than in most of the Italian and French places of resort; the hotels charge from three to five guldens a day, though it is possible for those whose circumstances will not permit of this to live for less. Good furnished houses and villas can be found for families who prefer their own housekeeping; but in these cases it is well to bring one's own cook, as good cooks are seldom to be found here.

But the great object of interest here, the absorbing occupation of life is—eating grapes. The first thing one does on arriving at Meran is to buy a basket; and the visitor is to be seen at seven next morning, gay and exultant, buying grapes to fill his purchase of the evening before, wondering much at their cheapness, yet discovering, after a few days' experience, that he paid rather

highly in giving at once the price demanded. For grapes of the richest bloom and most delicious flavor are to be seen all around; they hang in purple bunches over all the hills, in every garden, round every cottage porch; carts and baskets full of them are brought into the town every morning, and they lie heaped on stalls in glorious profusion at the corners of the streets. Everybody who comes "takes the grape-cure," to the extent of eating more grapes than he ever did before in his life, unless he prefers figs, which are almost as plentiful and excellent. But I propose now to speak of those invalids suffering from bronchial affections, or incipient consumption, or other complaints, for whom this most agreeable of all medicines has been prescribed.

No quantity of grapes under three pounds a day can be considered as a true and energetic grape-cure—less than this is mere pleasant dallying. The patient begins with one or two pounds a day, dividing the quantity into three portions—one taken an hour before breakfast, the next between that and dinner (which takes place at 12:30 or 1 at latest), and the last portion in the afternoon or evening, an hour before the last meal of the day. The grapes must be eaten in the open air, an injunction obeyed to the letter at Meran, as everybody walks about eating grapes all day long, unless you prefer taking one of your three portions sitting in your veranda, gazing lazily out over the lovely country. After a couple of days, the quantity is to be increased by half a pound, until it reaches three or four pounds. This is often sufficient, dependent, of course, upon the nature of the disease, the progress it has made, etc. Many people eat six pounds daily, although as many as eight is said not to be unusual. Patients are not to be discouraged if they feel less well after three or four days of grape-eating. This is not seldom the case; but this crisis being past, they speedily feel the benefit of the treatment. One great advantage of the grape-cure is, that no special diet is enforced. Food in any way trying to the digestion is, of course, forbidden, and other fruit is in general not recommended; but after eating from four to six pounds of grapes daily, one does not feel any particular inclination for further indulgence in Pomona's bounties. Grapes, containing a large quantity of nourishment, have a very satisfying effect on the appetite generally, and less of other food is required; and in cases where the cure is taking good effect, the patient gains in weight, and, after a while, in strength also. As there are some diseases of the

respiratory organs for which the grape-cure is rather injurious than otherwise, it is necessary to consult a physician before undertaking it. The cure occupies from four to six weeks, and during September and October the grapes are in their best. Early ones are to be obtained in August, and late ones in November, but they are neither so good nor so efficacious. The country, too, is in its greatest beauty in the height of the grape season. Not but what April is a charming month at Meran, when the abundant almond and apricot-trees are a mass of blossom, and when the traveler, returning home after a winter spent in Italy, is tempted to linger awhile in the pretty little town before proceeding northward.—*Medical Union.*

Here is bliss for invalids; a new enterprise for California; a new delight for the fashionable world. Surrounded with the most agreeable hygienic resources, there is the promise in introducing the grape cure in California, of the most happy union of a pleasant medication with the pleasures of our rural resorts.

The addition of the grape cure to the use of our chalybeate springs and thermal waters will add another attraction for the thousands of wanderers to California in search of health. *In vite vita.* Just imagine yourself at a grape cure resort, gratifying your eyes with the beautiful landscape, and breathing the fresh air of the country. You rise early in the morning to enjoy your promenade. You meet young ladies in groups with their grape baskets on their arm.

"Ah, Mr. Doe," says one, "how pale and thought-wearied is your countenance; it really makes you look interesting; won't you take a grape?" "Ah, Miss Roe, your cure is giving your cheek a charming freshness. I should say for you, 'a little more grape, Capt. Bragg.'"

Away, then, with all the bitterness of physic. With our now barren hill sides covered with vineyards producing grape of the most delicious flavor, and rich in those saccharine materials which digestion converts into pure blood and muscle, California will become the favored region of the gods for health and happiness. Nor will it be necessary in order to profit by this grape cure to go so far from

the city. Beautiful sites are to be found along the hill-sides of Contra Costa. San Mateo abounds with lovely locations, to all which, if the vine persistently refuses to grow, the grapes may be easily conveyed.

Or you may sit down by the sea side near "the Cliff," and have your tokays, and muscadines, and isabellas brought you fresh from Charley Peters' market. We will descant when we have more space upon the curative properties of the unfermented juice. We have for the present approached as near as we dare to the confines of the "local option" law. But, to be a little more serious, we may prognosticate the future of California in the grape culture from recent reports of the enormous revenues derived from the grape vine in France. With us no phylloxera prevails; we have not yet arrived at that epoch, but the commercial reports prove how rapid is the increase of the production of the grape.

The following is from the *Alta* of October 12th :

We clip from the monthly report of the (U. S.) Department of Agriculture for August and September, 1874 :

"The Prefect of the Department of the Rhone has published a decree directing the Mayor of each Commune within his jurisdiction, upon the indication of the presence of the phylloxera, to proceed at once to determine the limits of each local district infected by the insect. Every vine affected, and all the roots within five meters (sixteen feet), are to be dug up and burned. This decisive measure has not escaped sharp criticism. To save the vine lands of the Rhone from destruction by this pest, it is now proposed to secure winter irrigation by a grand canal connected with that river. M. Dumot, *Ingenieur en chef des ponts et des chausses*, has developed, before a governmental commission, a scheme for the construction of such a canal, within four years, at a cost of 102,000,000 francs. This, it is supposed, will rescue from destruction over 60,000 acres of vine lands, yielding products worth 200,000,000 francs per annum, and taxes amounting to 20,000,000 francs."

We have no means of verifying the figures, which appear to us incredible. According to them the vineyards near Lyons (in the Rhone Department), in a district not noted for the excellence of its wine, yield $666 gross annually, pay $66 annual taxes per acre, and would have to pay $333

per acre for the proposed irrigation works. Thousands of farmers in California are making a great outcry about monopoly because they are solicited to pay $20 in advance, or $2 dollars annually per acre for irrigation. A long article from the Commissioner of Agriculture about the proposed irrigation works near Lyons might be valuable to certain people of the San Joaquin Valley. They refuse to make $10 for fear that somebody else will make $1. They imagine that by holding back they can make the $11 entirely for themselves; but a little more information and study would enable them to see their error.

Observe also the following in regard to the raisin produce in California:

Sun-dried raisins have been made in various portions of the State, and by a great number of persons, that were equal to the best imported; but the dealers and consumers of this fruit have done a great deal to discourage the business by refusing to pay the same price for the home-made article that the imported, of even an inferior quality, commanded. This is really a discouraging fact; but the home-made raisin is not the only article of home make that has met the same discouragement. It is a shame that our own people will continue to give a premium on foreign manufactured goods, but nevertheless it is true that they do it, and do it, too, with their eyes fully open to the effect this course produces upon new industries that require encouragement at their hands in the place of discouragement.

We can only say in conclusion that the grape cure is now inaugurated by the LANCET, for a few days since we sat down with two of our patients before a magnificent vase of assorted grapes, of which the patients partook largely, and the doctor took a share of the prescription, and thus pompously was introduced the first case of treatment by the grape cure. *In vite vita.*

HE HAS HAULED HIS LAST LOAD.

Who has not heard of "Swill Barney," or more familiarly remembered, "Dirty Barney?" Who does not remember the good old soul, who was wont to drive his bony old nag and rickety swill wagon through the streets, disseminating sweet scents upon the breeze as he passed? Alas! poor

Barney is a-cold; his bright countenance will smile upon us no more. Yesterday afternoon his dead body was found under his wagon, at the corner of Railroad and Tenth avenues. The head was badly bruised, thus giving evidence that he had fallen from his seat and so ended his useful career. Oh! how the pigs will squeal in vain for his coming.—*Alta.*

Alas for poor Barney! Despite his virtues, he died in bad odor: suffocated by his own malaria, he fell from his ambrosial seat. Truly a Sanitary Commission from the Board of Supervisors should have followed him as chief mourners to his grave, as representatives of his last heirs. They may well weep at his loss, for they beneficently encouraged his enterprise and maintained him in his laudable efforts to regale the olfactories of mankind with his aromatic perfumes.

If with Barney's demise could also perish the wretched administration of his system of garbage gathering, the city fathers might find a consolation for the drainage of their tears. But we fear that the disciples of Barney will continue to receive the same kindly and encouraging support from the patrons of red tape. The committee referees will report; a week for mature reflection will be necessary; and an indefinite postponement for further consideration be ordered. The zeal of the Board of Health, which meets once a month to make a very poor exhibit of proceedings, is of no avail, for their power is only advisory, and therefore regarded as rather intrusive.

Barney could be seen, and the Barneyites can still be scented, all over the city; they seem still to delight in the horrible and pestilential odor they diffuse. Each one feels as safe as a skunk, for nobody dares to approach him. The system is a horror and a disgrace, and yet neither the Board of Health nor of Supervisors appear to have the energy to suppress it.

CIVILITY costs nothing—nay, is something to your credit. —*Punch.*

BARNEY'S LAST DUMP.

O nares! O mores!

To obtain an olfactory perception of the truth of these things we very recently made a "tour of reconnaissance," as military men express it. We first persuaded our official nostrils to believe that every impression made upon them by the undulations of etherial odors, *a la* Tyndall, were only modifications of Lubin's double-distilled extracts of violets. We proceeded on our mission, encouraged by the fact that as a member of the State Board of Health we had a duty and a privilege on our conscience. We felt that honestly we had a right to our say in the matter, and our "reconnaissance" will be rewarded by the gratitude of posterity. For the present we may patiently abide the result.

On an exploration of this importance, a witness and friend being required, one was selected, the altitude of whose head in the atmosphere would secure the safety of his life and render him unconscious of what was passing under his nose, and also in the case we should succumb, to report our emotional sensations to the press, and duly return our corpus to the Coroner. Thus re-inforced, we stepped from the car at the foot of Mason street and proceeded to the western extremity of the infected district. The atmosphere was already loaded with the exhalations we were in search of. At this point a long stretch of the so-called bulkhead extends eastward to Clark's Point. On the inside of this line, for more than half its length, is a lagoon filled with black, putrescent water, intersected here and there with patches of land filled in with all the old refuse stuff of the city. Through this bulkhead pass two or three wooden sewers or culverts, through which the tide can ebb and flow. But the horrific stygian lake within being deeper than the culvert openings, is by no means cleansed and washed by the flowing and ebbing waters of the bay. On the contrary, it is in these lakes, on their southern side, that the city sewers pour in their reeking

sewage. These black and putrid lagoons become an area for the ventilation and diffusion through the air of all the sewer gases. Here the more solid matters deposit, the volatile parts impregnate the atmosphere of this whole region, and only the more fluid portion escapes by the culverts into the bay.

Around its filthy shore lay scattered and decomposing bodies of dead animals, freely contributing their quota of the Lubinian perfume. If the ends of the sewers could only have been passed through the lake and attached to the bulkhead culverts, a very inexpensive operation, some hope of redemption by the ultimate filling in by Barney's contributions might be entertained.

On a portion of the land in the midst of the lake are deposited the cement cylinders of the company for the manufacture of drainage and sewerage pipes, a most suggestive and appropriate depot. But all this appears insignificant when we reach the purlieus of Meiggs' Wharf, the avenue by which our suburban relatives of Saucelito arrive from and depart to their salubrious mansions. Here is the centre of Barney's realm. Here you may see collected in decomposing heaps all his capital in trade. This wooden avenue, the sweet and lovely Alameda of North Beach society, is penetrated along its sidewalks with a number of oblong orifices. These are Barney's dump holes, and all day long may be seen his chariots, laden with the spoils of the metropolis, backing and dumping his trophies into the bay.

It was high tide when we witnessed the scene; the heavier portions of the loads would sink, but for acres around the lighter parts formed a "floating island" on the still water at turn of tide.

On the piles of garbage nearer the shore numbers of swine enjoyed their gambols and fattened on the mess, while disportive boys disturbed their feast and scrambled with them on the slopes of these kitchen mounds.

In vain we suggested to the little fellows to change their play-ground, as they might take home with them the

scarlet fever, and in a few days find their resting-place in Lone Mountain ; they heeded us not, but sported on.

It is through this odorous avenue that the denizens of Saucelito must pass to their airy and salubrious homes, and when among the picturesque hills of Marin they have ventilated their lungs and revivified their blood with pure oxygen, on returning to the city at their first step inspire the poisonous inundation into their freshly cleaned pulmonary organs, of this death-dealing atmosphere. Such is a view of Barney's last dump, and we congratulate ourselves that, having escaped these mortal dangers, we can inform the world that our duty is performed, and exhibit the future prospect of pestilential fever in San Francisco. A future epidemic might cost the people some fifty thousand dollars, while an immediate reform would be far cheaper and enhance the value of property, and preserve the lives of thousands of citizens who live on careless and unconscious of their peril.—EDITOR.

[I accompanied the writer in this tour, and can testify that his statement, so far from being exaggerated, does not tell one half the reality. W.]

Death of Dr. Anstie.

The death of Dr. Anstie will be universally regretted as a great loss to the profession. Another martyr from dissection wounds. It is only recently that Dr. Bowie, of this city, made a narrow escape from the same fate in the post mortem examination of D. Bourne's body :

In our last issue the death of Dr. F. E. Anstie, of London, was announced, but the cause of his death was mis-stated, owing to the incorrectness of the first statements of the London medical press. It appears that the doctor died of blood poisoning, due to a dissecting wound. Dr. Anstie pricked his finger with a needle whilst making an examination on Sunday, September 16th, at Wandsworth, of the body of a child who had fallen a victim to the malignant epidemic in the investigation of the causes of which he had spent the morning, greatly exposed to sewer-gases. The

wound was at once washed and sucked, but on Wednesday the doctor commenced to feel ill, and complained of pain in the right arm-pit. Chilly feelings later in the day became very prominent, and the pain and soreness of the arm increased very greatly. Thursday the patient was confined to his bed, and Mr. Brudenell Carter found him with a dry tongue, a dry, hot skin, and complaining of distressing headache and of much pain over the right pectoral region. During the day the symptoms increased in intensity. After a restless night the patient was still worse on Friday, and the assistance of Dr. George Johnson was obtained, who has since furnished the London *Lancet* with the following statement:

"I first saw Dr. Anstie with Mr. Brudenell Carter at 3 P. M., on Friday the 11th instant. He was then delirious, and quite unable to give a history of his illness. The tongue was dry; the temperature 105°; there was an erysipelatous blush about the size of the palm of the hand over the right pectoral muscle; there was excessive tenderness on pressure in the right axilla, and over the front of the chest on the right side; the slightest movement of the arm elicited a cry of pain; there was no appearance of inflammation about the wound on the hand or up the arm. At half-past nine in the evening I again saw the patient, in consultation with Dr. Burdon Sanderson and Mr. Carter. His condition remained unchanged. At half-past nine on Saturday morning I again met Mr. Carter. We found the breathing was very rapid; there was a distinct friction-sound over the middle and lower lobe of the right lung, and dulness on percussion over the same space; the erysipelatous redness and the tenderness on pressure remained the same. The urine was highly albuminous, and contained numerous epithelial casts. About the middle of the day symptoms of a blood-clot on the right side of the heart came on; the features were livid; the breathing rapid and shallow; consciousness was rapidly lost, and death occurred at half-past 2 P. M."

No post-mortem was made.

Dr. Anstie was born in December, 1833, and was, consequently, not quite forty-one years old at the time of his death. He was just reaching that pecuniary success which follows in most cases what may be termed professional success. It is stated that some years since a very determined effort was made to induce his acceptance of a professorship in New York City.—*Philadelphia Medical Times*, October 10th, 1874.

Book Reviews.

THE PHILOSOPHY OF SPIRITUALISM AND THE PATHOLOGY AND TREATMENT OF MEDIOMANIA: TWO LECTURES. By Frederick R. Marvin, M. D., Professor of Psychological Medicine and Medical Jurisprudence in the New York Free Medical College for Women. Read before the New York Liberal Club, March 20th and 27th, 1874. New York: Asa K. Butts & Co. San Francisco: A. L. Bancroft & Co.

This is a book for the age we live in, for the profession of medicine and for the people. The author states that in the United States there are 4,000,000 individuals and Judge Edmonds calculates the number at 10,000,000 who are actual Spiritualists, or have a strong tendency to adopt this so-called Spiritualism. Here, then, is an audience to speak to, and we hope from the gravity and seriousness of this question on the grounds of its infectious character, that the publishers may obtain a wide circulation for this work; and especially, that the New York Liberal Club and all societies for the diffusion of useful knowledge may place a copy in the hands of every mediomaniac, sending also a few to the members of the press in the spirit-land. As prevention is better than cure, all minds that are now sane should imbue themselves with the ideas of this work to guard them from the taint of a spreading infection, because at present at least the victims run free at large, there is no asylum for their detention, there is no pest house in which to quarantine those affected with the contagious epidemic. Their pest house is the resort in which their mediums preside.

Our author gives the term mediomania to what is termed spiritualism in the present acceptation of the word, which, however, is a perversion of its true meaning. Genuine spiritualism is that belief in the immortality of the soul, which consists in a transition from its existence in our material body in this world of time, to an independent existence in the next world, or the world of eternity. In this immaterial state it can never again return to its mundane

possessor and commune with it or its relatives until those relatives' souls have themselves passed from time to eternity. In this view the spirit or soul is immaterial, immortal, intangible, unmeasurable, and to a living man on earth forever inaccessible. The perverted spiritualism of which the author speaks, possesses a double spirit, one existing in the world of eternity possessed of sufficient form and attributes, still to comprehend and concern itself with affairs in the world of time. Having sufficient leisure at all times to leave its avocations in the immensity of space and appear at call, when summoned back to earth.

The second form of spirit is constantly hovering in our nearer atmosphere, hovering around and engrossed in all the occupations, thoughts and emotions of human life, possessing form, vesture, and the characteristics of its former existence on earth, all which are plainly visible to certain peculiarly endowed mediums with whom they condescend to converse and permit all sorts of familiarities. This may serve not as a definition, but as a hasty description of the spiritualism alluded to in Professor Marvin's book.

Mediomania, then, is a form of insanity, it is an aberration of mind from its normal state to a belief in the existence of the souls of the departed in the form of spirits which still commune with the living and exert an influence over their affairs, whether of a physical, sensational or emotional nature, and a further belief that mediums may, in a transient swoon, abstract their minds and hold communion with the spirit.

We may now interpose an objection to the use of the word insanity in this connection, and that mediomania cannot be considered as a disease in a forensic view. Although this spiritualism approaches so near to a mania that it is not so easy to distinguish it from insanity, or its expressions as the product of a diseased brain. Spiritualists know too well what they are about, and mediums are too cognizant of their operations to be ranked among the insane. In law we believe they are amenable to the statutes for the suppression and punishment of misdemeanors and crimes.

It is by no means probable that mediums would be held irresponsible before the law for slanders and libels uttered in their intermediating swoon, although the instances are innumerable of informations imparted in regard to future events to occur to those interested in business affairs, mining prospects, rise and fall of stocks, matrimonial alliances, and all the protean forms of love's dilemmas, which we must consider the product of thousands of intrigues and machinations more or less damaging to human hopes and characters. It is probable that no case of slander or defamation of character has been brought before a tribunal, for adjudication. Yet why should it not? for we insist that the plea of insanity would not exculpate the slanderer or release from damages the sorceress.

Were it not unfair to the author, we would quote in full his whole racy and eloquent first lecture.

A few extracts must suffice to introduce his refutation of spiritualism to the careful study not only of thinking minds, but of that still more numerous class who are so easily seduced to think what others think for them. Hence we give some characteristic quotations :

Materialism is both unscientific and groundless. It has no root and can have none. Like Idealism, it is a dream in which imagination usurps the place of reason. I reject all forms of Materialism and among them Spiritualism. Spiritualism is the heart of Materialism—it is materialism of Materialism—the worst kind of Materialism. Its ghosts are material and appeal to the five senses—they have shape, color and density; they walk and talk like men and women. Never did any form of Materialism attack the soul so effectually as Spiritualism. Other forms of Materialism have left the soul out and ignored its existence, but Spiritualism is an organized effort to drag it into view and exhibit its earthiness. Helvetius and Holbach denied its existence, but Robert Dale Owen and Judge Edmonds would exhibit it very much as I would exhibit a piece of timber or stone. "Here is our ghost," they cry ; "come and look at it."

Before proceeding to the argument of this lecture, I shall endeavor to show that the soul cannot be material substance—cannot be substance at all. It is pretended that spirit is an infinitely attenuated matter — matter in a

perfectly rarified condition. This being the case, it is claimed, and justly, that no violence is done to reason in ascribing to spirit the properties of matter. But the position is untenable. The air we breathe and in which we live presents to the eye neither shape nor color, but it—formless, colorless and impalpable—is not spirit. Men do not see the air, define its outline or touch its substance. The eye detects no difference between atmosphere and vacua. I can resolve the air into its elements and they are not spirit.

But there is a substance more attenuated than air; so thin that the five senses take no cognizance of it; so light that common air sinks in it like lead. We do not see, hear, taste, feel or smell it, and yet it fills all space and makes a vacuum a philosophical impossibility. We should have remained ignorant of this substance but for the discoveries of science. Guessed at by the ancients, its existence has been demonstrated by astronomers and philosophers. When Huyghens established the undulatory theory of light, he placed the last grain of proof in the balance and turned the scales. This substance is named ether; it fills all space and on its great waves our solar system rocks like a little boat. There is no spot in the universe unfilled with matter. Here analysis ends. We cannot go behind ether and separate it into elements. We seem to have arrived at the ultimate element of the universe and can go no farther. We have gone beyond air and questioned ether, but have learned nothing about spiritual substance. Mind and air are not one, else the soul is composed of nitrogen, oxygen and carbonic acid. But ether is not spirit, and if it were it could appear to no one, for it has neither shape nor color and is demonstrable only by a process of reason based on the wonderful sciences of astronomy and optics. Spirit then, if it be a form of matter, must be infinitely more attenuated than ether—it must be so thin and subtile that no process of reason will demonstrate it. And yet there are persons who say that spirits appear to them and converse with them. When I shall have spoken with air and conversed with ether, then I will commune with spirit. Matter is everywhere and everything. If spirit be a substance other than matter, it is nowhere and nothing; if it be matter, by definition, it is not spirit.

But does this argument do away with the soul? Does it abolish the spirit? Are there, then, no factors in the problem of life? Is there no problem at all? Far from it; the argument is for the soul and is prefatory to another

argument based on scientific data. It is only a short path by which we arrive at those grounds on which such men as Darwin, Tyndall and Maudsley rear the structure of the soul. Further on we shall inquire what the scientific soul is; let us now find what the soul of the Spiritualist is and what theories are entertained with regard to its *post mortem* existence.

The author dissects to its finest filaments the sophistical theories of Andrew Jackson Davis and Judge Edmonds, whom he refutes with more facility, because he considers him a more lucid and vigorous writer :

Now what evidence does Spiritualism afford that the soul survives the body? We are told, the evidence of manifestations. Every manifestation belongs to one of three classes: the physical, metaphysical and physico-metaphysical.

Physical manifestations are such as are perceived by the senses. Table-tipping, spirit-rapping and the audience of mysterious sounds are familiar examples of physical manifestations. A purely physical manifestation proves nothing. The fact that you cannot explain the manifestation has nothing to do with the subject. You cannot explain the growth of a blade of grass. This growth is more wonderful than the tipping of a table, and yet it never suggests the existence of a soul. No man ever built a theory of immortality on a blade of grass or suspended such a theory from the petal of a rose. The mystery of generation is unexplained—the deepest intellects have searched in vain for its hidden meaning, but what would you think of the sanity of a man who could argue thus: The *causa causarum* of generation has never been discovered—the whole subject is wrapped in mystery—therefore the soul is immortal. Are the revelations, poems and speeches that fall from the lips of media wonderful? The revelations, poems and speeches that fall from the lips of *sane* men and women are still more wonderful; but who treasures the ordinary conversation of the average man and on it builds a theory of another world? Mystery proves nothing—it is the element that interferes with proof.

For thousands of years the electric flash illuminated the midnight heavens before men looked on lightning with other emotions than those of awe and terror. They could not solve the mystery of the lightning and, savage-like, they referred it to the supernatural. But shall we of the nineteenth century fall into the same error? Shall we resign

all strange and startling facts to the realms of the supernatural? In the name of Science, no! a thousand times no! Let us patiently investigate and quietly wait the developement of science; and I believe we will not have long to wait, for it is already clear that much, if not most, of the "spiritual phenomena," are the results of deliberate imposture, pitiable credulity or grievous disease."

The speeches, poems and discourses of mediums in their state of mental abstraction, are simply improvisations of minds gifted with that rather rare power. All impromptu discourses are similar improvised abstractions. As well might a Webster or a Longfellow be called mediums as any trance stage speaker. Improvisation is effected by a sort of trance-like state of all the faculties of the mind, except thought and imagination, which are themselves rendered intensely acute and active when abstracted by the quiescent state of the other faculties and disturbing impressions. The difference in the presentation of the thoughts is the feigned mystery and seductive hallucination in which the one is wrapped, while the other, devoted to more rational and nobler purposes, appeals only to the fascination of man's reflective reason. We cannot abstain from one more quotation:

Are not these things very sad? To me, Spiritualism seems the most mournful calamity that has ever happened to the human race—it is a revival of the dark ages in the noonday of the nineteenth century.

We will now speak of the scientific soul. What is it? Physicians once believed in a nervous fluid which was supposed to circulate in the nerves as blood circulates in the artero-venous channels. Alexander Munro declared in 1783 that the nerves are tubes or ducts conveying a fluid secreted in the brain, the cerebellum and spinal marrow. Willis, who lived during the reign of Charles II, taught the existence of a nervous fluid, as did most of the early neuro-physiologists, and I am sorry to say that the theory is not yet wholly dead, for Dr. Richardson has recently published a paper, entitled "Theory of a Nervous Ether," in which he seeks to revive faith in a nervous fluid.

Modern physicians, as a class, reject the theory of a nervous fluid. I have dissected, pulverized, dissolved

and chemically analyzed various nervous tissues and centres without finding other fluids than those necessary to the nutrition and anatomical constitution of nerve tissue. That which is liberated at nervous centres and is the secret of nervous impulse is not a fluid—it is a force. I say *liberated* at nervous centres, not generated, for I do not believe that force is generated anywhere. There never was and there never will be more force in the universe than there is to-day. The utilization of force by the brain is thought—this utilization is the function of that part of the brain which we call the cerebrum. Here we arrive at the scientific soul—it is nervous energy. A soul finer than any metaphysical entity — thinner than a ghost — purely immaterial. The soul is not dust.

> "Dust thou art, to dust returnest,
> Was not written of the soul."

What soul known to the Spiritualist has so fine a texture as this soul of science?—a soul so ethereal that none hear its mystic footfall on the grosser highway of the air, and yet not so subtle as to elude the patient student who takes Nature at her word. This is a soul worth possessing—that is correllated with its fellow forces and so unites us with the glorious processes of the universe. Away from our little brains, into the forever of space, float waves of motion. Ceasing to be waves of nervous motion, they reach the air and become waves of atmospheric motion. The thought you think may vibrate the other side of the universe in the trembling of a flower or the majestic sweep of a planet. We are one with every object on the earth and with the dear old earth itself; and as our planet glides through the fathomless abysses, we know the rhythm of her cosmic motion throbs in our little brains and pulsates in every breath we breathe.

> "Knowst' thou th' importance of a soul immortal?
> Behold this midnight glory—worlds on worlds!
> Amazing pomp: redouble this amaze!
> Ten thousand add; and twice ten thousand more;
> Then weigh the whole; one soul outweighs them all,
> And calls th' astonishing magnificence
> Of unintelligent creation poor."

Every one recognizes the fact that the body changes from moment to moment. You have not the same bodies with which you were born—your bodies are not the identical bodies you possessed yesterday—nay, they are not exactly the same bodies with which you entered this room. Every moment a cell is born—every moment a cell dies. What has been said of the body is true of the soul. The

soul, like the body, is neither fixed nor changeless. You have not the same soul you had yesterday. No, nor the same soul with which you entered this room. Forces are forever arriving in your brain and departing. These forces are using you and you are using them—reaching your brain they serve its purpose and are your soul. Having served its purpose, they cease to exist as thoughts, change their form and go on other missions. Science has demonstrated the existence and immortality of the soul and has given to the demonstration a mathematical certainty. The soul is immortal in its own nature, and in history, and in the race.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, AT ITS TWENTY-FIFTH ANNUAL SESSION. Held at Easton, Pennsylvania, May, 1874. Volume 10, Part 1. Published by the Society.

We extract the following from the above pamphlet:

A CASE OF TRANSFUSION.

By J. M. Junkin, M.D., of Easton.

Some years ago I saved the life of a patient by transfusion. No account of the case has been published, and, as the simple means I used were successful, a knowledge of them might be useful to other physicians under similar circumstances. I will give a history of the case in as few words as possible.

I was called, about ten o'clock at night, to see Mrs. F—; found her flooding fearfully from an abortion, at about six weeks. She was very much prostrated from loss of blood, so that the pulse could scarcely be felt at the wrist. I immediately checked the blood by a tampon of soft rags, took all the pillows from under the head; still the prostration increased. I gave stimulants; she still continued to sink; I then raised the foot of the bed, so as to keep what blood she had in the brain, as much as possible. I continued increasing the elevation until she had to be held, to keep from pressing against the headboard; still the pulse became more feeble, so that it could scarcely be felt at the carotid artery.

I said there was no chance of saving her life, except by giving her more blood from another person. The husband at once offered his arm; but how was it to be transferred? —being far in the country, and no possibility of getting any instruments, nor was there any time to spare, even if there had been any within reach to send for. I asked if

there was a syringe in the house; one was brought, glass, female, with a curved neck and a bulb on the end of it; I said it would not do; but immediately thought glass would melt, so I ran to the fire, thrust the end among the coals until it was softened, drew it out into a slender tube, broke the end off to a proper size, put it in the fire to smooth the end, then back to the patient, tied up the husband's arm and drew several ounces of blood—told him to put his finger on the orifice—filled the syringe, opened a vein in the arm of the patient, and forced as much blood as possible into the vein, probably not more than two ounces passed; but I did not find it necessary to repeat the operation; the husband's blood was of a much richer quality, so that in a few minutes the patient began to rally, the pulse gradually coming up; by daylight I was able, by lowering a little at a time, to get the bed on a level, and in the course of a few hours to place a small pillow under the head.

It is not necessary to detail anything further. The recovery was rapid and complete. A little more than a year after I delivered the lady of a large healthy child.

THE MISSOURI DENTAL JOURNAL. W. H. Eames, D.D.S., Editor. September, 1874. St. Louis.

This *Journal* contains an interesting article on the teeth during pregnancy. It is too lengthy to republish, as its value would recommend. We can only attract attention to it by giving its leading subjects. Would that we could give an impulse and encouragement to the development of our Dental College in California. If "*for every child a tooth*," and for every tooth a dentist is requisite, the importance of the subject may be easily imagined.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF MICHIGAN. For the Year 1874. Series 2, Volume 6.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. October, 1874. Volume 1, No. 3.

THE BANKER AND DEPOSITOR. Volume 1, No. 5. San Francisco. October.

THE NEW YORK MERCANTILE JOURNAL, MERCHANTS', MANUFACTURERS', AND BANKERS' LEDGER. October 10, 1874.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR NOVEMBER, 1874.

Original Communications.

On the Value of Ulceration of the Os Uteri as a Diagnostic Sign in Uterine Diseases.

BY A. P. HAYNE, M. D.

After the many valuable contributions which modern pathology has added to the clearer understanding of uterine affections generally, as well as to ulceration and induration of the cervix uteri in particular, it might almost appear a work of supererogation to approach a subject already apparently exhausted, with the hope of throwing any new light upon it.

The frequency, however, of the occurrence which forms the subject of this paper, and the divided opinion which still holds the medical world in opposition, as to its true value, as connected with Leucorrhœa and other more serious uterine disorders, especially in the relation of cause and effect, seem to justify the few remarks which we propose to offer. Our object on the present occasion will be briefly to review the ground which has been so ably gone

over by West, Bennett and others, as to whether ulceration of the os uteri is entitled to the importance which some modern authorities give it; or, in other words, whether it is properly to be regarded as the *cause* or *consequence* of the far greater number of those diseases to which the female generative organ is liable.

As is usual in nearly every controverted point of medical inquiry, two opposite and diametrically antagonistic theories have been advanced upon this subject, and the advocates of each respective side have carried their convictions somewhat to the verge of extreme. Thus, according to the one, ulceration preceded or followed by induration of the cervex uteri is regarded as the primitive and exciting cause of nearly all uterine troubles, while, according to the other, it is strictly a consequence of them, or at best, but an "isolated and independent abnormal condition," and entitled only to secondary consideration, as far as remedial measures are concerned.

We shall not attempt to follow step by step the able argument against the former of these theories, as set forth in the Croonian Lectures of Dr. West, but simply glance at some of the chief points upon which that argument is based.

The main point upon which the advocates of the importance of ulceration, as the primitive cause of uterine diseases rely, is founded upon the structural as well as the physiological conditions of the os and cervex itself.

Now, on both of these assumed facts, we think the decided weight of anatomical as well as physiological research is in opposition to the existence of any such claim. Not only is the os and uterine neck of a decidedly inferior organization, in point of structure and development, but of vastly less importance in all those physiological changes which take place in pregnancy and menstruation. It is the body of the uterus and not the cervix "which chiefly grows at the period of puberty," and it is the body and not the neck "which is concerned in the important function of each menstrual period." It is, also, as Dr. West has

remarked, the epethelium of *its* cavity and not that of the neck, which is so abundantly intermixed with this secretion." "After delivery, a still more striking difference," says the same authority, "is observable." The mucous membrane of the cervix "resumes *at once* its former condition." while that of the body is detached and is "renewed again and again before the organ reverts to its former state." If to these conditions we add the diminished sensibility and the impunity with which dilatation and other manipulations, not to mention the application of caustics, etc., are borne in mind, we think there can be no doubt as to the fallacy of the claim set forth.

We pass next to the consideration of its frequency. On this point there seems also to be an erroneous opinion. In one of the tables given by Dr. West, we find the history of sixty-two cases which came under his personal observation, in all of which a careful examination was made after death. In these the uterus was found healthy in *thirty-three* and diseased in *twenty-nine*. In the twenty-nine diseased, there was *ulceration* of the os in eleven, disease of the *lining membrane* of the uterus in seven and *induration* of uterine walls in five. In three cases there was both disease of lining membrane and ulceration of os, and in the remaining three ulceration of os with induration of the uterine walls.

If, as West and his followers maintain, ulceration of the os be "a pathological condition of small importance" and not unfrequently "dependent solely on functional disturbance," the cases referred to certainly tend strongly in support of his assertion. For these reasons, besides others which we shall not stop to mention, we think it may be safely affirmed that ulceration as a *cause* of uterine troubles has been both overestimated and regarded with undue importance. This conclusion derives additional confirmation when we compare its frequency in married women who have led a virtuous life with that large class of females who gain their livelihood by prostitution. On this point, the statistics given by Dr. West possess great interest. In

forty prostitutes examined in St. Bartholomew's Hospital, the os and cervix uteri was found absolutely healthy in twenty-seven. In ten of the remaining thirteen "the ulceration was so slight as scarcely to deserve the name," while in the other three the ulceration involved about one-third of an inch of the os. When we take into consideration that all of these cases were laboring under syphilis or gonorrhœa, the result is at once striking and remarkable. In no case was there the slightest trace of induration of the uterine neck.

If we turn now to the married women, we find two hundred and sixty-eight cases which were examined by the speculum, and out of this number, "*ulceration* of the os was found in one hundred and twenty-five, while in one hundred and forty-three there was *no trace* of this condition." The inference would therefore seem to be established that prostitution was not of itself a cause of either ulceration or induration of the uterine neck, and that its assumed frequency was not borne out by facts.

The only remaining point which we purpose to notice is the influence of ulceration upon fecundity and abortions. For the solution of this question, the statistics given in Dr. West's tables are not only numerous but prepared with great care. We can only, however, give a few of the important results thus obtained. In 980 healthy women, the *average* fecundity was 4.17 children to each, while the average of abortions was 0.7. In the same number of women with uterine symptoms, the average fecundity was 2.7 children to each and 0.47 abortions. In women with uterine symptoms *without ulceration*, the fecundity was 3.3 children and 1.3 abortions; and in women with uterine symptoms *with ulceration*, the fecundity was 3.5 children and 0.89 abortions.

From the above we draw the following conclusions: *First*—That fecundity was proportionally greater in ulceration of the os than in any other diseased condition; and *Secondly*—That abortion was slightly less in this than in the other states, showing, to use the language of Dr. West,

"that this condition does *not* offer any serious obstacle to the performance of the great function of the generative system."

The main feature of this discussion, however, is not as regards these questions, instructive as they are in a physiological point of view, but really whether the modern idea of the treatment of all cases of ulceration of the os and induration of the uterine neck, as local and primary affections, is not both radically and scientifically erroneous; or in other words, like treating dropsy as a disease instead of a symptom?

On this point we think Dr. West's argument is fully sustained both by fact as well as experience. It would be impossible, in the limited space allotted in this journal, to give even a cursory glance at the many interesting facts and cases which are cited in his course of lectures; suffice it to say that they bear out the conclusions at which he has arrived and are given with a frankness and fairness which challenges our approval.

There are two points involved in this subject which we deem worthy of special notice, and which we shall briefly in conclusion notice.

The first is that by localizing the treatment of uterine affections generally to one spot (as in ulceration) and limiting the resources of medicine to topical measures, as the chief, if not only means of cure, we establish, as Dr. West remarks, "a very bad precedent and exert a very injurious influence both upon the patient as well as the practitioner." By concentrating her attention upon a slighter ailment as the source of *all* her troubles, we call into action "that nervous susceptibility which is a part of the female character," and which it is one of our greatest difficulties to overcome. With regard to the practitioner, the effect is no less injurious, causing him to become, at best, a routinist, and "to unlearn all that physiology may have taught him" with regard to the uterus and its functions, teaching him, in fact, "to see all the varied manifestations of disease in the expression of *one fact* and one alone."

For these reasons, if for no other or higher considerations, we think that the modern idea of treating nearly all uterine troubles as if dependent upon the fact of the presence of an ulceration of the os or an induration of the cervix uteri is amenable to the objections which it has been our endeavor to point out in the foregoing remarks. As a diagnostic sign of uterine disorder, an *ulcerated* os is often one of our safest and surest guides, and may with propriety be treated by such local remedies as an auxiliary treatment may call for ; but as to expecting relief to deeper-seated troubles by directing our attention solely to this *one symptom* alone would, in our opinion, be both irrational and contrary to all the teachings of pathology.

Thesis on the Double Ligature in Aneurism.

PRESENTED TO THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA, FOR THE DEGREE OF M. D., BY R. A. MCLEAN, SESSION OF 1874.

The ligature was first applied to an artery for the cure of aneurism by Antyllus, a surgeon of the fourth century. He cut into the tumor, turned out the clot, and ligatured the vessel above and below the sac. This operation, now called the "old operation," had fallen into disuse until Mr. Lyone, of Edinburgh, revived it. In his hands it proved remarkably successful, owing, probably, more to the adaptability of his cases to this form of treatment than to any special merit of the operation itself. Nothing shows this better than the large percentage of mortality resulting from this operation in the hands of other surgeons.

Notwithstanding the many brilliant results obtained by the Edinburgh surgeon, this treatment can never become an established method of treating aneurism. This is

apparent upon considering the morbid anatomy of aneurism. The vessel, except in traumatic cases, is almost constantly diseased for some distance above and below the tumor. The application of a ligature to the diseased coats of an artery, cannot but result disastrously, the consequent secondary hemorrhage frequently necessitating ligature upon a healthy part of the vessel above, or amputation. This operation is, therefore, mainly of use in traumatic aneurisms of the extremities, in which no disease of the coats of the vessel exists.

THE METHOD OF ANEL.

Up to the year 1710, no better treatment of aneurism had been devised than the operation of Antyllus. At this time Anel, a French surgeon of distinction, ligatured the brachial artery for a traumatic aneurism at the bend of the arm. He applied the ligature immediately above the sac, but does not seem to have had any other idea in view than that of simply cutting off the supply of blood to a tumor which was threatening to burst. The French ascribe to him the honor of discovering the principle upon which the application of the ligature as now performed is based. It is clear, however, that the credit does not belong to Anel, for he merely simplified the old operation of Antyllus by tying the artery just above the sac without cutting into it, and securing the vessel above and below as Antyllus did. He would probably have pursued the same course in a case of idiopathic disease—not understanding the difference between the two forms of aneurism.

THE HUNTERIAN OPERATION.

The English justly ascribe to John Hunter the merit of revolutionizing the treatment of aneurism. This great surgeon had for many years made the morbid anatomy of this disease his especial study. He had dissected and experimented extensively upon animals. The result of his labors was the enunciation of the following ideas: That aneurismal tumors were oftener the result of disease of the coats of an artery than of direct injury. That this

diseased condition of the vessel existed for some distance above and below the tumor. Finally, that the proper place for the ligature was at such a distance above the tumor as to include a sound part of the artery. In December, 1785, he had an opportunity of testing his theory upon a case of popliteal aneurism. He applied four ligatures to the femoral, just below the middle part of its course, and succeeded in saving his patient. His reason for using four ligatures seems to have been to gradually compress the vessel gently in several places, so as not to destroy its vitality by making too much pressure at any one point. These ligatures were drawn loosely, thus only partially obstructing the flow of the blood. By this he endeavored to favor the development of the collateral circulation and at the same time promote the gradual consolidation of the tumor by the deposition of laminated fibrin upon the inner wall of the sac. Since the time of Hunter, his operation has undergone some modifications, without, however, invalidating to any extent the principles upon which he instituted it.

As now performed the Hunterian operation has been successful upon nearly every artery liable to aneurism. It consists in first selecting a healthy portion of the vessel above the tumor and below a branch of some size if possible. The incision is made in the course of the vessel. The sheath having been exposed is drawn up with the forceps and nicked transversely. The contained structures are carefully separated from the artery, and the latter is secured by passing a ligature beneath it with a curved aneurism needle. The ligature is then tied firmly so as to lacerate the middle and inner coats.

The immediate result of this procedure is the stoppage of the pulsation bruit in the tumor, in consequence of the cutting off of all blood supply. The limb soon becomes cold and may be slightly paralyzed. After the second day pulsation in the tumor may reappear, the result of enlargement of the collateral vessels between the point of ligation and the sac. This usually continues but a short

time, the sac gradually becoming perfectly occluded, so that no circulation takes place through it. After the second or third day the limb increases notably in temperature, owing to the increase in size of the capillaries.

This subsides in a few days, and the temperature then falls lower than at any time subsequent to the operation. This is the time to encourage the circulation by warm applications to the limb, as gangrene is now the great danger to be guarded against. If the warmth of the part is kept up artificially, the natural heat gradually returns as the development of the deep collateral vessels progresses.

The original plan of Hunter was to shut off the circulation gradually, to favor the development of the collateral circulation, and to cause a deposition of fibrin upon the walls of the sac. He supposed that a tumor consolidated gradually would be less likely to become inflamed than if it were filled with clotted blood resulting from a sudden stoppage of the circulation through the sac. The experience of surgeons since the time of Hunter has shown that his precautions were unnecessary, for in nearly all cases of aneurism the branches of the vessel above the tumor are enlarged by the impediment offered to the flow of blood through the sac, which, though in some cases very slight, is sufficient to cause the circulating fluid to seek other channels than the main vessel. The supposition that the sac is more liable to inflammation when filled with clotted blood than when filled with laminated fibrin seems quite plausible; but clinically considered the presence of coagula within the sac has not frequently been found to result in inflammation.

CHANGES RESULTING IN CURE.

The changes by which a cure of aneurism is effected may be studied as they occur in the ligatured vessel, in the aneurismal sac and in the vessels of the limb.

a. As now applied, the ligature is drawn tight enough to lacerate the middle and inner coats. They retract and leave the outer coat alone supporting the ligature. Their

lacerated extremities become slightly inflamed and plastic lymph is effused, which, with the fibrinous clot, ultimately causes the complete occlusion of the vessel. The fibrinous clot is the result of the coagula left in the vessel between the ligature and the first branch above it. It gradually loses its coloring matter by absorption and becomes an organized mass of fibrin containing a few blood vessels, derived, it is supposed, from the lacerated extremity of the inner coat. At first it extends nearly as far up as the first collateral branch above, but finally becomes absorbed, leaving a fibrinous cord occupying its original place in the caliber of the vessel.

b. Upon the ligature of the artery supplying an aneurismal tumor, the sac at once ceases pulsating. The blood within it gradually becomes transformed from a mass of coagula to a fibrinous substance, and is subsequently absorbed entirely, with the laminated fibrin previously deposited upon its inner walls.

c. The changes occurring in the vessels of a limb after the ligation of its main artery are the most interesting of all in a practical point of view; for it is owing to the occurrence of these changes that the cure of aneurism is possible. After the obliteration of the natural channel through which the limb is supplied with nutrition, the latter would soon perish from gangrene were its blood supply not kept up. This is accomplished by the dilatation of the branches given off from the ligatured vessel above the point of occlusion. They become rapidly enlarged, and by their anastomoses with branches given off from the main artery below the sac produce many different channels for the blood. The aggregate capacity of these enlarged branches equals that of the obliterated vessel.

CAUSES OF FAILURE OF THE HUNTERIAN OPERATION.

In cases not resulting in cure, the want of success may be due to the occurrence of gangrene of the limb, inflammation of the sac, persistence of pulsation in the tumor, or secondary hemorrhage. Though these accidents are all of a serious nature and always compromise the life of the

patient, yet none other is so rapidly and certainly fatal as secondary hemorrhage. It has always been the one great obstacle to the successful ligation of the larger and deeper seated arteries. In the fourteen recorded cases of ligature of the innominate, secondary hemorrhage destroyed the patient in every instance but one. This was the celebrated case of Dr. Smyth, of New Orleans, in which he tied the innominate for subclavian aneurism. Even in this case secondary hemorrhage occurred; and if he had not tied the vertebral artery whence the regurgitant blood came, this case would not have stood alone as the only successful ligation of the innominate.

Erichsen says of this case: "As this bleeding came "from the distal side and from the subclavian artery, the "vertebral artery was tied, with perfect success—no "bleeding recurring. This case is of the utmost value in "surgery; it shows that the secondary hemorrhage which "may be looked upon as the necessary sequence of the "ligature of the innominate artery, may be arrested, and "the patient's life saved by the ligature of the principal "branch that communicates with and that carries regurgi-"tant blood into the distal end of the artery which was "originally ligatured. This fact is entirely new in opera-"tive surgery."—(Volume II. page 114).

The success of Doctor Smyth was due to his having stumbled upon the expedient of tying the vertebral to check a hemorrhage which must have soon proved fatal. His patient was saved by the accidental application of a principle in the ligature of arteries, which, I shall endeavor to show, is the only scientific means of guarding against secondary hemorrhage, namely, the double ligature securing perfect occlusion of both the distal and proximal extremities of the ligatured vessel. The merit of having discovered this principle does not belong to Smyth, but to another surgeon who has for many years systematically used the double ligature in tying arteries.

In the eleven cases of ligature of the left subclavian within the scalene muscles, all but two resulted fatally

from secondary hemorrhage. In arteries of the second and third magnitude, the proportion of deaths from this cause is, of course, not so large ; but even in these cases it has proved fatal often enough to imperatively demand the adoption of a precautionary measure.

THE SITE OF SECONDARY HEMORRHAGE.

In the study of secondary hemorrhage a thorough knowledge of the anatomical condition of the vessel at the site of the ligature is of the first importance. This can only be gained by the dissection of such cases as result fatally. Dissections have repeatedly been made by Velpeau, Gross, Rodgers, Erichsen, Guthrie, and Porter, with the following results: Velpeau says: "It is from the lower "end of the artery that this nearly (hemorrhage) always "takes place." (Velpeau, page 747, volume I.) In one of the fatal cases of ligature of the first part of the left subclavian, (that of Rodgers) the dissection showed the proximal end of the vessel to be completely occluded ; but the distal end was patulous and had evidently been the seat of the fatal secondary hemorrhage.—(Gross page 772, volume I.) The dissections of Guthrie and Porter show also, that the hemorrhage almost constantly takes place from the distal side of the ligature. Erichsen makes use of the following pointed language in support of their conclusions: "The opportunities which I have had of exam-"ining the state of the vessels in several cases of fatal "secondary hemorrhage, lead me fully to concur with "Guthrie and Porter, that the blood in the majority of "instances comes from the distal and not the proximal "side of the wound. The greater tendency of the distal "end of the vessel to bleed appears to arise partly from "the less perfect occlusion of this portion of the artery, "and partly from its greater liability to slough in conse-"quence of the ligature interrupting its supply of blood "through the vasa-vasorum. It is no objection to this "opinion that the fatal hemorrhage is often arterial; for, "though it is true that the blood which is carried to the "distal end, is for the first few days after the application

"of a ligature, of a venous hue, yet after the collateral "circulation is once established, it gradually assumes a "more scarlet tint, and at last becomes completely arte-"rial." (Erichsen, page 262, Volume I.)

CAUSE OF SLOUGHING OF THE DISTAL END.

The opinions just quoted leave us no room to doubt that secondary hemorrhage is the result of the patulous condition of the distal end of the vessel, consequent upon sloughing. The cause of this sloughing is evident upon considering the manner in which the nutritive supply of the coats of the artery is interfered with at the distal side of the ligature. Surrounding the vessel and loosely connected with it by means of a delicate areola tissue is the sheath of the artery. Within the walls of the sheath ramify the vasa-vasorum. The vasa-vasorum are minute arteries derived from small branches of a neighboring trunk or from secondary or tertiary branches of the same artery which they nourish. From the inner wall of the sheath pass the delicate twigs of the vasa-vasorum, which are the direct sources of the arterial supply to the coats of the vessel. In the operation of tying an artery the ligature is applied directly to the outer coat and between it and the sheath. The ligature is applied within the sheath so as not to include structures which it may contain other than the artery; and not for the purpose of avoiding interrupting the circulation in the vasa-vasorum of the sheath, for the vasa-vasorum receive their supply from such a multitude of minute vessels external to the sheath and entering it at every point that even if it were included in the ligature the nutrition of the vessel below would not be affected. Now in opening the sheath, in passing the ligature around the vessel, and in separating the artery from the accompanying structures, the vascular connections between the inner wall of the sheath and the outer coat of the vessel are ruptured to an extent varying according to the inaccessibility of the artery. This portion of the coats of the artery thus deprived of its nutritive supply invariably sloughs; and were it not the fact that the ligature before

being tied is always drawn up to a point above the denuded portion of the vessel, the proximal as well as the distal end would be patulous after the denuded part had sloughed.

From the above it will be seen that while the method now usually employed in the ligature of arteries ensures the occlusion of the cardiac extremity, it fails to prevent a patulous condition of the distal end of the ligatured vessel so often found in fatal cases of secondary hemorrhage. The occlusion of the distal extremity is left to chance, and for this reason alone the Hunterian operation as now performed is imperfect. The authors already quoted make no mention of a means by which so obvious a defect can be remedied. They do not seem to consider it necessary to prevent the patulous condition of the distal end, while they all pointedly acknowledge that secondary hemorrhage almost invariably takes place from this side of the ligature. That perfect occlusion of the distal as well as the proximal end can be attained, and is the only surety against the occurrence of secondary hemorrhage has long been the opinion of Professor Toland. As he is the only surgeon who has adopted a systematic operation to secure this end, I shall describe the procedure as

PROFESSOR TOLAND'S OPERATION.

It consists in the use of a double ligature so applied that both the distal and the proximal extremities of the ligatured vessel are perfectly occluded. The steps of the operation are as follows: The curved aneurism needle of Dr. Mott is first threaded with a strand of silk about twice as long as would be used in the ordinary operation. This strand is formed of four thicknesses of sewing machine silk, well waxed, but not twisted, the intention being to have a flat cord instead of a hard round cord, in order to prevent wounding the outer coat of the artery too much. Next the incision is made in the course of the vessel. Its sheath having been exposed, is pinched up with the forceps and slightly nicked. The artery is then isolated from the associated structures, and the aneurism needle armed with

the double ligature before described, is inserted through the opening in the sheath and passed under and around the artery. The presenting looped extremity of the ligature is then carefully drawn away from the end of the needle with the blunt hook. The needle is now withdrawn, leaving the ligature beneath the vessel as a double strand connected at one extremity. The looped extremity of the ligature is next divided, leaving the two ligatures separate, under the artery. The upper or proximal ligature is then drawn well up to the superior extremity of the incision in the sheath and securely tied with a square knot, so as to constrict the vessel at a point where the sheath has not been torn away from it. The lower or distal ligature is next drawn down to the inferior angle of the wound in the sheath below the denuded part of the vessel and secured with the square knot, so that it also constricts the artery at its place of junction with the sheath.

Ligatured in this manner, the only part of the vessel which is denuded and subsequently sloughs, is a portion from one-third to one-half an inch in length situated between the two ligatures. The distal extremities becomes perfectly occluded through the same process by which this is effected in the proximal end.

SPECIAL OPERATIONS.

It must be borne in mind that the double ligature used as above described is founded upon these principles: that the denudation of the artery is the cause of sloughing, and that this denudation and the consequent sloughing must be prevented from resulting in secondary hemorrhage. In most of the arteries this can be effected by the use of the double ligature, but in some it is unnecessary—for instance, when the sheath is not entered and consequently is not detached from the artery.

Ligature of the subclavian, common, internal and external carotids, axillary, brachial and femoral, and the smaller vessels may be accomplished as described above.

LIGATURE OF THE EXTERNAL ILIAC.

In examining the relations of the external iliac artery we find that it differs from the vessels of the neck and extremities, in containing nothing besides itself within its sheath. The external iliac vein lies to the inner side of the pelvis, and may be said to have a separate sheath, which is merely connected to the sheath of the artery, but not identical with it. It is, therefore, not necessary to enter the sheath, as the needle can readily be passed between the artery and vein, by including the sheath of the artery and the vessel within its concavity. Professor Toland uses but one ligature in this operation, which is performed as follows: The external incision having been made in the usual manner through the abdominal muscles, and transversalis fascia, the peritoneum is carefully dissected up from the iliac fossa with the fingers and pushed towards the pelvis. The artery will be found pulsating along the inner border of the psoas muscle, with the external iliac vein parallel with it and to the inner side. The aneurism needle threaded with the flat ligature, before described, is passed under the sheath of the artery from the outer to the inner side, and between the sheath of the artery and the sheath of the vein. The needle is then withdrawn, leaving a single ligature under the sheath of the vessel, which is tied with the square knot.

In this operation the application of the same principle upon which the double ligature as used in other operations, is based, secures the vessel from secondary hemorrhage. As the ligature is placed around the outside of the sheath with its contained artery, the nutrition of the arterial coats is not interfered with either above or below the point of ligature; consequently no portion of the vessel sloughs except the small section constricted by the ligature, and before this occurs the distal and proximal ends are both completely occluded.

STATISTICS.

The femoral has been ligatured twenty-two times, and the external iliac eight times, by Professor Toland, without

the loss of a single patient from secondary hemorrhage. In the usual operation, secondary hemorrhage occurs in ten per cent. of the ligations of the femoral, and in eight per cent. of ligations of the external iliac.

LIGATURE OF THE INNOMINATE.

The fatal issue of the cases of ligation of the innominate artery is due to secondary hemorrhage, consisting of blood regurgitating from the circle of Willis through the common carotid and vertebral arteries. This regurgitating blood can only escape in consequence of sloughing of that portion of the arterial trunks on the distal side of the ligature upon the innominate. This sloughing is owing to the denudation of the artery and consequent deprivation of its nutritive supply through the vasa-vasorum. In searching for and in tying the innominate artery, it is impossible to avoid denuding the superior part of its trunk, together with the lower part of the common carotid. How, then, is the unavoidable sloughing to be prevented from resulting in secondary hemorrhage? The indication is, to prevent the regurgitant blood of the common carotid and vertebral arteries from communicating by their partulous extremities with that portion of the arterial trunks which must necessarily slough. From what has been said of the double ligature it will be seen that it is applicable in this case.

The incision is made as usual in the shape of an L, the vertical limb corresponding with the inner edge of the sterno-mastoid, the horizontal with the superior border of the clavicle. This is sufficient to fully expose all the parts concerned in the proposed operation. After the vessels have been properly exposed the first ligature is applied as near the distal extremity of the innominate as possible, care being taken to leave no denuded part of the artery between the ligature and the aorta. Next the common carotid is to be tied. If it be a subclavian aneurism the carotid is tied just above its origin from the innominate. If it be a carotid aneurism the ligature is placed upon a healthy part of the vessel above the tumor.

Finally the vertebral is tied as near its origin from the subclavian as possible. In the ligature of the common carotid and vertebral, in this operation, the ligatures should be drawn well up so as to leave all the denuded portion of the artery between the ligature above and the ligature around the innominate below. The nutrition of the coats of the vessels above the ligature not being interfered with, they do not slough, and are, consequently, perfectly occluded, so that no hemorrhage can occur from them upon sloughing of the denuded portion of the vessels concerned in the operation.

This operation, though most difficult, is quite possible in the hands of a surgeon possessed of that degree of dexterity which is the certain result of frequent dissections and faithful study of the anatomical relations of the parts concerned in the operation. It succeeded the only time it was ever performed, and is the only successful case of ligature of the innominate on record. In this case the operation which really saved the patient's life was performed only as a last resort. Syncope had occurred from secondary hemorrhage from the distal end of the wound when Dr. Smyth determined to tie the vertebral. The common carotid was tied previously with the innominate. The hemorrhage did not recur and the patient was cured.

The success of Dr. Smyth's case in which the principle of the double ligature was accidentally applied under very unfavorable circumstances, proves that ligation of the innominate artery by this method is possible. It may ere long be repeated with equal success.

THE TONGUE.—I must confess I am so wonderfully charmed with the music of this little instrument that I would by no means discourage it. All that I aim at is to cure it of several disagreeable notes, and in particular, of those little jarrings and dissonances which arise from anger, consciousness and gossipping.—*Addison.*

Thesis on the Physiological and Toxical Action of Opium upon the Human System.

PRESENTED TO THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA, FOR THE DIPLOMA OF M. D., SESSION 1874, BY WILLIAM P. MCDERMOTT.

The practitioner of medicine is led irresistibly to theorize upon the action of the means which he employs for the cure of disease, and the relief of suffering, and at every turn is met with the futility of his reasonings. He seeks in vain from every reliable source of knowledge, only to find that the *science* of therapeutics is the most backward of all of the medical sciences, and not deserving to be considered yet upon that firm basis. But as physiology, pathology, microscopical anatomy and the other sciences advance, they must reflect light upon this branch of knowledge.

My subject is, "The Physiological and Toxical effects of opium upon the Human System."

After relating what has been generally accepted with regard to the action of opium, I have ventured to present my own views upon the subject, and facts in argument to sustain them. In those unaccustomed to the use of opium small doses calm the mind, and produce a soothing effect, generally followed in the course of an hour or so by a disposition to sleep. Pain is allayed without the loss of consciousness. Its primary effect upon the circulation is to quicken the pulse, which, however, soon becomes slower as the reaction comes on, and the general sedative effects are manifested. The mouth becomes dry, while perspiration breaks out upon the surface of the body; the only one of the secretions that is almost invariably increased, the others being diminished. Larger doses of the drug produce effects that are much more decided; the gently stimulating impression produced by small doses is exaggerated, so that there is much excitement for a time; one under its influence may feel compelled to laugh, sing, or dance, and otherwise exhibit signs of its exhilarating effects. The mind

becomes exceedingly active and revels in imagination, or is capable of unusual efforts. The pulse is strong and full, the head is hot, with noises in the ears and throbbing temporal arteries. Sleep follows, often heavy, which is a condition of torpor. The breathing may be stertorous, while disagreeable dreams ensue. In eight or ten hours perhaps the person awakes, has headache, nausea, and dry tongue.

Some persons are much more susceptible to the effects of opium than others, and are affected in a different manner. The symptoms vary. In some the effects produced are pleasant, while in others the reverse is the case. Sometimes the stimulating effect is the most prominent; at others the narcotic. Some persons are extremely susceptible to its action; so much so, that a small quantity might prove dangerous. Christison in "A Treatise on Poisons," page 714, mentions a case. "I am acquainted with a gentleman on whom seven drops of laudanum act with great certainty as a hypnotic. In such a one doses which are safely taken by many might prove dangerous." An ordinary medicinal dose is one to two grains; a full dose would be three grains. But as small a quantity as four grains has been stated to have proven fatal. An authentic case is reported where the quantity taken was four and a half grains, combined with nine grains of camphor, death resulting in nine hours. (Christison, page 713.)

It is necessary to observe the utmost caution in administering opium to infants, as the most insignificant doses may prove fatal. It is supposed to be so dangerous in them because of the rapidity with which absorption takes place. Those who have become habituated to the use of opium can take with impunity quantities that would be fatal in others. The author of the "Confessions of an English Opium Eater" took at one time about nine ounces of laudanum daily. Its activity is proportioned to the directness of its entrance into the circulation. Greatest activity is shown when introduced into a vein, then into the cellular tissue, next the stomach, then the rectum, its effect upon the unbroken skin being least.

When opium has been taken in poisonous quantities the symptoms begin with giddiness and stupor, the period of excitement is usually absent, the person drops at once into a condition of stupor, rapidly increasing, soon becoming insensible to external impressions, generally lies still with the eyes closed and pupils contracted, occasionally, though rarely dilated. The breathing grows slower, the pulse, which is at first full and strong, becomes more frequent and weak; the power of swallowing is impaired or lost, and the muscles are relaxed. A profuse perspiration is a frequent symptom. Sometimes the face is flushed, commonly it is pale.

Death is produced by asphyxia, occurring in from six to twelve hours after the poison has been taken. If the person outlive twelve hours, recovery is the usual result.

The promptness with which its action is manifested depends partly upon the solubility of the preparation which has been taken. The morbid appearances commonly presented, are turgescence of the vessels of the brain, and an effusion of serum into the ventricles, and at the base of the brain. The lungs are gorged with blood. The stomach and intestines are sometimes found in a reddened condition; and the skin is usually livid in the depending portions of the body.

Various theories have been advanced to account for the action of opium upon the system. According to one opinion, it is conveyed with the blood to the brain and spine, on which it acts. Another doctrine supposes that it enters the blood vessels, and produces on their inner coats an impression which is conveyed along the nerves. Some suppose that opium acts by being carried with the blood to the brain, and by the transmission of local torpor of the nerves, arising by direct application to their sentient extremities to the brain. The effects of opium, however produced, are exerted upon the brain and nervous system.

Opium is classified as a cerebral stimulant. Some thoughts which I have had upon the action of opium suggested by the facts observed in the study of physiology,

the analogy sometimes existing between the condition produced by opium poisoning and apoplexy, and the phenomena presented by a case of opium poisoning which I once attended, have led me to hold views differing from those of the writers whose works I have read upon the subject. I suppose that opium produces its effects upon the system in the following manner: Entering the circulation, it first affects the sympathetic nerves supplying the blood-vessels, producing in them a condition of paralysis; as a consequence the vessels dilate, the brain becomes congested, and a condition is established identical with apoplexy. In opium poisoning "the lungs are sometimes found gorged with blood as in many cases of apoplexy." (Christison, Treatise on Poisons, page 731.) "Dilated pupils, or one is dilated while the other is contracted." (Ringer Therapeutics, page 374.) "Effusion into the pons Varolii will produce appearances almost identical with those of opium." (Ringer, page 375.) "A small extravasation in the pons Varolii so situated as to press upon the medulla oblongata may produce great difficulty of deglutition and respiration." (Flint, Practice of Medicine, page 585.) It is impossible to distinguish the effects of narcotics from this disease by the appearances in the body after death." (Christison, page 669.) The author last quoted says, "It might even be a fair subject of inquiry whether death from at least some narcotic poisons, such as opium, is anything else than death from simple apoplexy." (Page 669.)

The following facts of physiology bear upon this subject: If the influence of the glossopharyngeal, pneumogastric and sympathetic nerves be destroyed by their section, the following effects are produced in the organs which are influenced by these nerves: the pharynx is supplied by the glossopharyngeal; the natural stimulant of food in contact with the mucous membrane of the pharynx excites the act of deglutition, but if irritated with the finger or a feather a sensation of nausea is produced which may be sufficient to cause immediate vomiting. In the œsophagus "each successive portion of the mucous membrane receives in turn

the stimulus of the food and excites instantly its own muscles to contraction; so that the food passes rapidly from one end of the œsophagus to the other by an action which is wholly reflex in character and entirely withdrawn from the control of the will. A section of the pneumogastric or of its pharyngeal or œsophageal branches destroys, therefore, at the same time the sensibility and the motive power of these parts. The food is no longer conveyed readily to the stomach, but accumulates in the paralyzed œsophagus into which it is forced by the voluntary movements of the mouth and fauces, and by the continued action of the upper part of the pharynx." (Dalton's Physiology, page 477.) The muscular coat of the stomach is paralyzed to a considerable extent, and the sensibility of its mucous membrane diminished by section of the pneumogastric. The pneumogastric has a very important influence upon the function of the lungs: its action is principally sensitive, conveying to the medulla oblongata the impression which originates in the lungs from the accumulation of carbonic acid, and excites the respiratory movements by reflex action. There may be observed when these nerves are divided: first, hurried and difficult respiration, owing to paralysis of the vocal chords produced at the same time; this condition soon subsides, and then follows a marked diminution of the frequency of the movements of respiration. Changes soon take place in the lungs. After death the lungs are found in a peculiarly solidified state, different from inflammatory hepatization; they are gorged with blood and empty of air.

If the sympathetic be divided in the neck, contraction of the pupil of the eye upon the corresponding side follows the operation. Most important changes in the state of the circulation follows section of this nerve. Immediately a vascular congestion results in the corresponding parts, the phenomena attending which are peculiar, the quantity of blood circulating in the part is increased, with greater rapidity of movement. All the vessels of the part are dilated, and more blood passes through the capillaries in a

given time and returns through the veins in like abundance. The color of the venous return is brighter red than normal, due to the increased rapidity of circulation; the changes which nutrition effect not having had time to alter completely its condition.

The effects produced upon the secreting glandular organs by division of the sympathetic are of interest in this connection. They are excited to action by the natural stimuli of food, etc. "An antagonism appears to exist in the regulation of the circulation in the vascular organs between the sympathetic nerve and the motor filaments derived from the cerebro-spinal system. For if the branch of the chorda tympani which penetrates the submaxillary gland be galvanized it produces an excitement of the glandular secretion, increased activity of the circulation, and a red color of the blood in the veins. The division of this nerve is followed by a contrary result. The effects produced, therefore, by galvanization of the chorda tympani are those produced by division of the sympathetic; and the effects produced by galvanizing the sympathetic are those which follow division of the chorda tympani." (Dalton's Physiology, page 540.)

CASE OF OPIUM POISONING.

A woman, aged 35, married, no children, unhappy in her marriage relations, addicted to drink, had been deprived of all stimulants for some time, and in her desire for drinks began to swallow anything that she thought might satisfy her craving. Among other things she drank a bottle of Perry Davis' pain killer, which contained about an ounce and a half; opium is an ingredient of the compound, but in what proportion I have not been able to find out; probably it is present in considerable quantity, although she may have got the poison from another source, but of that I was unable to satisfy myself. I was called at about 10 P. M. The friends supposed that the drug had been taken about 4 P. M. The patient's condition upon my arrival was as follows: Pupils contracted, respiration slow, pulse

weak and frequent. She was being kept awake with great difficulty by her friends shaking, talking to her, and throwing cold water in her face, etc. I administered emetics of Zinci Sul. gr. xxx. Pulv. Sinapis ʒii. and Ipecac, pulv. ʒss. one after the other, without producing an evacuation of the stomach or even causing nausea. To induce vomiting, I swept the fauces with my finger, and depressed the base of the tongue, feeling at the same time—though not intentionally—the epiglottis and its posterior margin. I caused her to take a large quantity of strong coffee at frequent intervals during the night, and administered Ext. Belladonnæ fl. gtt. vi. every hour and a half, four doses, and thought that after each dose patient seemed to brighten for awhile, but would sink back into a state of almost insensibility. She was kept roused up, some one talking to and shaking her when not walked about, slapping her cheeks with a wet towel, cold water applied to the head and kept her walking about supported by either arm, in a well ventilated cold room. This treatment was continued until daylight, when she was well recovered; I should suppose about fourteen hours after she had taken the dose.

The symptoms in the case, which seem to show that the action of the drug had paralyzed the reflex system of nerves, are:

1st. Difficult deglutition, the involuntary reflex portion of the act being deficient, a portion of the fluid swallowed regurgitated through the nostrils.

2d. Want of sensibility of the fauces when touched with the finger.

3d. Touching the posterior margin of the epiglottis did not cause reflex action.

4th. Insensibility of the stomach; the stimulating emetics given made no impression.

5th. Slow respiration.

6th. Contracted pupils.

7th. Congestion of the brain may be assumed to have existed, as it is an invariable consequence of the poisonous action of opium.

I have endeavoured to show that similar effects are produced by the action of opium, to those that are known to follow paralysis of certain nerves by their division and by apoplectic seizure.

The symptoms commonly present in cases of opium poisoning, and in the case that I have reported, may in this way be explained.

For the physiological effects:

It is obvious that the action of opium suspends reflex nervous action. If it become necessary to quiet the movements of the bowels, it is certainly accomplished by the use of opium; peristaltic action is at once controlled.

Reflex vomiting is quickly stopped by morphine. Incessant cough, due to the irritable condition of the throat, is allayed by its use. Increased peristalsis of the stomach, causing dyspepsia by not allowing the food to tarry long enough for the necessary digestive changes to occur, and producing diarrhoea from the presence of undigested food in the intestines, is relieved by the use of opium taken in small doses a few minutes before each meal.

Opium is of inestimable value in the treatment of inflammations. I quote what has been said by some writers concerning it: "This drug I feel sure not only acts as a sedative to the nervous system and a quieter of pain: it absolutely modifies the inflammatory process by its influence upon the nerves." (T. G. Thomas, Diseases of Women, page 226). "Clinical experience and sounder pathological views, however, have led to the knowledge of its great value in the treatment of inflammatory affections wherever situated. It is valuable not only as a palliative, but as a curative remedy." (A. Flint, Practice of Medicine, page 150). "Opium, therefore, is indicated in the first stage of bronchitis, as it is in most acute inflammations." (A. Flint, Practice, page 150).

If my theory of the action of opium upon the sympathetic be correct, the *modus operandi* in inflammations is, perhaps, that it prevents stasis from taking place in the capillaries by accelerating the blood current, as seen to follow

section of this nerve. It acts also upon the sensitive nerves, quieting the pain which is caused by the irritation. Irritation of the nerves will produce fluxion by relieving the irritability; tendency of blood to the part is averted.

Institutes and Practice of Medicine.

Homicide—Suspected Simulation of Insanity.

BY I. RAY, M. D.

No matter connected with insanity makes a larger draft on the resources of the expert than the task of deciding correctly in some cases of suspected simulation. This might naturally be expected where a sane person is performing his part with all the ingenuity and cunning which a life of criminal habits is apt to develop, but the difficulty is often none the less where the manifestations are very demonstrative and genuine; and the reason is, that however these may conflict with the results of one's own observations, no one profoundly impressed with a sense of the infinite diversity of nature, even in her wanderings, will be in haste to conclude that they are, on that account, simulated. And the chances of reaching a correct conclusion are not increased by the disposition of the expert to forget that, in the very act of guarding against the deceptions of the patient, he is very apt to deceive himself. To add to his embarrassments, the opportunities for testing the mental condition may be very limited, and quite unsuitable. A few interviews with the party in his cell, with such information as attendants may give, furnish, perhaps, the only materials with which he must construct his final opinion. That they are often insufficient to warrant any stronger conclusion than a guess, is precisely what might be expected, and the fact does no discredit to the sagacity of the expert. And yet this is not incompatible with the other fact, that under the surveillance of a Hospital for the Insane, the true character of a suspicious case cannot fail, at last, of being correctly understood by any one of considerable clinical experience and tolerable sagacity.

I have thought the following case worth relating, because it presents a rather unusual combination of traits, and, for that reason, may convey some useful hints to future observers.

In March, 1871, Michael Trimbur, with two or three other young men, was convicted in one of the courts of Philadelphia, of a heinous outrage upon a young woman, and sentenced to fifteen years' imprisonment in the Eastern Penitentiary. He was of Irish parentage, about twenty-two years old, of rather small stature, and with a countenance indicative neither of stupidity nor ferocity. The crowded condition of the prison rendering it necessary, to some extent, to put two in a room, T. and one of his associates in crime were assigned to the same room, with their mutual consent and satisfaction. And up to the last, they seemed to be on the best of terms with each other. On the morning of the 7th of May, 1872, when the keeper went to their cell with their breakfast, Michael said very quietly that Webb would not need any. On inquiry, Webb was found on the bed quite dead, with his head badly bruised. Michael immediately confessed that he killed him while lying in bed, with the board used for closing the ventilator. When asked how it happened, he said he rose early, and struck Webb on the head, several times, he making no resistance. When asked for his reasons, he admitted that they had no quarrel, but said that Webb had frequently abused his (T.'s) mother, and he would not allow anybody to do that. Neither then nor subsequently, did he express any sorrow for what he had done.

Previous to his trial for this second crime, his counsel requested me to ascertain his mental condition, as there was some reason for suspecting that T. was crazy. The officers of the prison where I went for this purpose, informed me that no indications of insanity before the murder had been noticed by any one, and that they first heard of it some time afterwards. On being asked what they had heard, I was told that on passing from one part of the prison to another, he looked upwards and said to the keeper, "O, what bright thing is that up there?" meaning the sun; and also, that having made considerable noise during the night, he was threatened with some privation if he persisted in it, and accordingly he became quiet from that night forth. The officers regarded these two manifestations as mere make-believe, and had no faith in his pretended insanity. During my first visit, which

was over one hour long, we conversed about the circumstances of his two crimes, about his family, his education and employment, and about ordinary affairs and topics in which he might be supposed to be interested, and while he talked freely, without the least reluctance, not a word fell from his lips that could excite a suspicion of insanity. Though not particularly deficient in understanding, he had obviously received but little education, had no regular employment, and his social surroundings had been of a pretty low order. He gave the same account of the murder which he did at first, and without any sign of regret. Of the first offense, he then and always subsequently, declared his innocence, and there was some reason to think that in this he spoke the truth, his only offense being that of keeping bad company.

A few days afterwards I made him another visit. For some fifteen minutes the conversation was very much like that of the previous visit. Then he rather suddenly went to the farther side of his cell, and took from a shelf a cheap card photograph of a child, or young girl, which he brought to me, his whole manner exhibiting a sort of earnestness I had not observed before. This he said was his mother, the Virgin Mary, and forthwith he launched out into a stream of talk, consisting of wild, strange, incongruous notions, connected by no obvious bond of association. In this jumble of matter, in uttering which he needed no prompting, there was no repetition of words or phrases, and it was curious to see how a person who could not be supposed to have gained much command of language, could vary his modes of expressing such barren nonsense. The following specimen of his talk will give a better idea of it than any description possibly can.

"I give all of it to my mother. Neither is jealous, and she shall be my wife. I am going to be most a spirit. She needn't die for me and live as long as I live. She shall have as much to do with everything as I do. She is Mary, the mother. I am her third husband—will give her my writings. Jesus Christ was two or three hundred when he died. He laid right down and died. Nothing comes into this world with stronger eyes than I have. I have got to die for that person—any strong person, Lazarus. I am Lazarus. I am to have the strongest eyes in the world, the best hair, the best of everything. Prettiest man that ever was born—made of the best stuff. Miss Wills was Moses' second wife. Mary, the mother of Jesus, is to be my wife."

In the course of the next two months I visited him twice, and obtained only a repetition of the same sort of discourse and behavior; and these were the materials, in connection with the facts already mentioned, derived from the officers of the prison, out of which I was to form my opinion respecting the prisoner's mental condition; and the task was not an easy one.

Unquestionably, his exclamation about the sun was simulation. In no form of mental disease with which he could possibly have been affected, can we suppose such a lesion of the mental faculties as that would imply. He was not demented; he was not raving; he had no hallucinations. His perceptive powers were neither weakened nor perverted; and it was the only instance of the kind. This fact raised the suspicion of simulation in regard to all his crazy manifestations, some of which, certainly, were not calculated to remove that suspicion, though none were obviously incompatible with insanity. The entire correctness of his discourse in the first interview, the abruptness of the transition into a stream of wild and whirling words, and the peculiar character of the thoughts they conveyed, produced a first impression not very favorable to a conviction of his honesty. The last mentioned trait seemed indicative of a low grade of dementia more than any other form of insanity, and this seemed to be inconsistent with the clearness and vigor of the rest of his discourse. During my first visit he was not aware of my function or purpose, but at my subsequent interviews he knew, at least, that I was a physician. This fact, too, was a ground of suspicion, stronger to others, probably, than to myself. So far then the tendency of his manifestations favored the theory of simulation.

On the other hand, a mature consideration of all the circumstances of the case convinced me that they presented nothing incompatible, necessarily, with the existence of real insanity. Men who have been much conversant with the insane in hospitals—not meaning those whose knowledge consists in having *seen* many thousand patients—need not be told that sometimes, for one purpose or another, they make a show of being more crazy than they really are. They see what is going on around them, and if not too much occupied with their own condition, they need only a little power of mimicry and a sufficient inducement, to imitate it. In one of our regular hospitals—many years ago, thank God—it was one of the customary performances for the entertainment of visitors, to show off a

big, double-fisted, unkempt, unshorn patient, acting the role of the furious madman. And he did it, if not very correctly, yet well enough to excite the applause of the lookers on.

Many insane do certain things as well as they ever did; they plan, contrive, anticipate, in furtherance of a special purpose. There is nothing strange or anomalous, therefore, in the fact of their endeavoring to act the madman; of course, in a phase of the disease different from that which they really exhibit. The criminal classes, to which most of these simulators belong, know as well as everybody else, that the plea of insanity is one of the dodges whereby people now escape the punishment of their crimes, and they may not forget it, nor neglect to act accordingly, when they become insane themselves. It may seem, at first glance, a work of supererogation for a man obviously insane to endeavor to impress others with the belief that he is the subject of another and even a very different kind of insanity. The mystery vanishes when we consider that, usually, no insane person thinks himself to be insane, believing as they do, with extraordinary tenacity, that the delusions they entertain are gospel truths; while the folly of their actions is strictly in accordance with the requirements of the occasion, and both the delusions and the folly indicative, as they think, of the soundest reason. For the purpose in view, therefore, the role of the simulator is as necessary to them as to others. Thus, Trimbur being unconscious of his own real insanity, but with mind enough to understand his situation, and to remember what he had heard about insanity in connection with crime, concluded to make a show of being crazy.

I have said that the style of his discourse resembled that of dementia—a form of disease not to have been expected under the circumstances—and therefore suspicious. Unusual, such a phenomenon certainly is, but I am not prepared to say that it is conclusive proof of simulation. We must be cautious how we consider the experience of any individual in so vast a field as the aberrations of the human mind, as having comprised every form and shape which they can possibly take. The larger our experience, the more are we impressed with the infinite diversity of nature, even in the domain of mental pathology, and all, too, under the control of inflexible law. A closer observation of the prisoner might have revealed some connecting links between the sound and unsound trains of thought, which would have rendered the contrast less extraordinary.

Again, it was a very significant fact in regard to his mental movements, that the perceptive faculties exhibited no aberration whatever, except the single instance first mentioned. Questions involving relations of time, space, distance, &c., were always correctly answered, and indeed, in regard to all ordinary matters, clearly beyond the sphere of his wild notions, there was not a sign of derangement, real or pretended. Thus he abstained altogether from the dodge—if I may use the term in lieu of a better—which naturally presents itself to the simulator. His object is to make an impression, and he chooses, therefore, the strongest and least mistakable manifestations of disease—such as will be known at once to all men. He says, perhaps, that he is a hundred years old ; that a place near by is a dozen miles off ; that he knows not at all, persons with whom he has been intimate all his life ; and in short, he misrepresents the simplest matters of fact that happened under his observation. He may not show this trait in every particular, because he may be afraid of over-acting his part, and think his purpose better answered by holding up occasionally, but he will not entirely abstain from using the opportunity thus afforded for making an impression.

It must be borne in mind that it is the simulator's purpose—the part he has undertaken to perform—to appear insane, and consequently he is careful not to appear sane, especially on occasions when his ends would be furthered by a successful imitation. He even lays plans for obtruding his mental disorder on the notice of the observer, though exercising all his ingenuity, perhaps, to conceal his design. It is not very likely, therefore, that Trimbur, if he had shrewdness enough to undertake the task of convincing others that he was actually insane, would have allowed our first interview to pass without the slightest attempt in that direction. He might not have suspected my purpose precisely, but he could scarcely have helped suspecting that I had some purpose. Accompanied as I was, by the physician of the prison, by his keeper, and part of the time by one of the officers, it was an opportunity he would have been only too glad to use. Indeed, with the exceptions above mentioned, it did not appear that he exhibited any sign of insanity, simulated or otherwise, to any officer of the prison.

It is a circumstance also worth considering, that in his statements respecting the murder, when first discovered, and before he was likely to have formed any plan of simulation, he made no attempt to palliate the deed, as a sane

man probably would. He never pretended that there was any sudden quarrel between him and his companion, that the latter provoked and assaulted him, and that he acted in self defence. Calmly and quietly he declared that he killed him while lying in bed asleep, because he had abused his mother.

We are glad to bear in mind that, on any question of simulation, we are to take into account the moral, intellectual, and social character of the party. A skillful attempt implies some knowledge of men and things, some notions, however crude, about insanity, some power of mimicry, and great tenacity of purpose. Most simulators have picked up from books or personal observation some ideas of how insane people act and talk ; and sometimes a knowledge of their antecedents will show the particular model on which their imitation is founded. Now no mortal could have been less qualified for acting the simulator of insanity than Trimbur. He was young, not very bright, with little education, his knowledge of the world was limited to a particular locality, abounding in the rough and rowdy element, and he probably had never seen an insane person in all his life. I found it difficult to believe that a person with such a record, could, by pure force of invention, achieve a jumble of thoughts so nearly resembling the utterances of the insane. And in recording them, as in the specimen above given, I found it impossible to follow him so rapidly as to get the vague, broken, indistinct, half uttered expressions marking the transitions from one definite thought to another, and of which only those familiar with the insane can have any adequate conception.

Here then were the reasons for and against the theory of deception, and had no attempt to deceive been made, as I was obliged to think there had, I should not have hesitated to believe him truly insane. As it was, they greatly preponderated, but so long as there was wanting that test furnished by a more close and continuous observation of discourse, deportment, manners, freaks and fancies, than is implied in an occasional, formal interview, when the person is controlled and restrained by the presence of a stranger, and if actually attempting to deceive, summons all his resources for the occasion—such an observation as he would undergo in the wards of a Hospital for the Insane —I was not ready to relinquish every doubt. However strong the presumption in favor of the prisoner, complete confidence was unwarranted under the circumstances. And so on the trial, in September, 1872, I testified that while

the prisoner had every appearance of being insane, he might possibly be simulating, and that I had not had such opportunities for testing his mental condition as were needed for forming a certain conclusion. He was convicted of murder in the second degree, but his counsel applied for a new trial, which, after considerable delay, was granted. On the 14th of November, 1873, he was tried again, and acquitted on the ground of insanity; the medical officers, and others connected with the prison, had become so strongly convinced of his insanity that their opinion was readily accepted by the jury.

In May last I visited Trimbur in the jail. He had grown more stout in body, and more stolid in look. The keepers told me he had been uniformly quiet and well behaved, and neither exalted or depressed. He was as ready to talk as ever, and his talk was the same sort of jargon that I heard before. He spoke occasionally of the Virgin Mary, though less of her being his wife or mother; but his favorite topic was the excursions he frequently made into various parts of the city. Among those who came to his cell at one time or another, and took him out, he mentioned General Washington, General Grant, Adam Sharpe, Mr. Down, "or some one just as they are sent from Heaven or court. The Virgin Mary sometimes because she is my aunt." When asked what he did when out, he replied that he kept a shop and sold things; and again to the same question, he replied, "you must do something to help Philadelphia." Running on in his way, he said, "Those people all are mixed up, all help get the world in order. When they get arrested, I make it very easy for them; I would like to get out of prison. Most all of them is in use—the best of them. Most in prison don't get out." The indistinct utterances, the rambling undertones interspersed among the more definite expressions, so characteristic of insanity, it is beyond my power to give. Again about the middle of August, I visited Trimbur and found no change in his manifestations. If stopped in the midst of his jargon, and asked how old he was, how many brothers and sisters he had, his mother's maiden name, how far it was from a certain locality to a certain other, the names of some old associate, the answers were correctly given.

About this time I first heard of an incident which, had I known it in the beginning, might have removed my doubts respecting the true character of the case. It seems that a week or two before the murder, Trimbur was visited by his mother, who came away greatly distressed, saying to

one of the keepers, that her son talked very strangely, as he had never talked before, and she was afraid he was getting crazy.

The history of the case here related, justifies me, I think, in drawing the following conclusions, viz: first, that Trimbur is now and was at the time of the homicide, really insane; secondly, that apprehending the consequences of the act, he concluded to simulate the disease of which he was already the unconscious subject; and thirdly, that finding it produced no impression, or that his powers of deception were unequal to the task, he abandoned the attempt after one or two trials.

The above narrative furnishes a strong illustration of the difficulty of dealing with such cases in penitentiaries and jails. No one practically acquainted with the ways of the insane need be told that such institutions furnish very inadequate opportunities for ascertaining the real mental condition of a prisoner suspected of feigning insanity. So far as it is confined to the manifestations during a special interview, he may escape detection, because he is fairly pitted against the expert, and the trial of his powers is very brief. In a hospital, on the contrary, he is observed much of the time, in every variety of circumstances, and liable at any time to be watched when he least suspects it. His manners, gestures, looks, habits, temper, conversation, may yield revelations more satisfactory than the wildest utterances; and the show of disease so well maintained by a careful and special effort, is constantly liable, under the influence of familiar circumstances, to slide into a natural deportment. For lack of any opportunity of this kind, I was obliged to withhold a positive opinion, notwithstanding my strong impression that I was dealing with a case of genuine insanity. As it happened, no harm was done, for the court, understanding the situation, purposely forbore to press the hearing for a new trial, the prisoner in the meantime becoming so obviously insane, that his acquittal was not resisted by the District Attorney. Every court, however, is not so considerate, and we can easily believe that in some parts of our country Trimbur would have been summarily hanged.

It is highly desirable that the opportunity should always be furnished somehow, for subjecting such cases to a kind of examination long enough and close enough to remove every doubt. Some of them surely might be satisfactorily investigated even in the prisons, if the physicians attached to those institutions had some practical knowledge

of the disease, and it were made their duty, as it never is now, to examine into their mental condition, for the purpose of giving an opinion on the trial. Why should it not be an indispensable qualification for the office, that they should be familiar enough with mental affections to entitle their opinions to some degree of respect?—*American Journal of Insanity.*

Helmholtz's Treatment in Hay Fever.

Professor Binz, of Bonn, writes to *Nature* that from what he has observed of recent English publications on the subject of hay fever, he is led to suppose that the English authorities are not accurately acquainted with the discovery of Professor Helmholtz in 1868, that certain uncommon low organisms are present in the nasal secretions in this complaint, and that quinine arrests their action. Professor Helmholtz had been subject to this disease since 1847, and from the fact that the attack always commences in his case between May 20th and the end of June, he was led to the suspicion that organisms might be the cause of the mischief. Examination with the immersion lens of a very good microscope, proved the presence of vibrio-like bodies, which he could never find at other seasons in the nasal secretions. Remembering the poisonous action of quinine upon infusoria, he made a weak neutral solution of sulphate of quinine, containing one part of the salt to eight hundred of water. This was effective enough, and caused moderate irritation of the mucous membrane. Lying flat upon his back, he poured from a pipette about four cubic centimetres into the nostrils, turning his head about in order to let the liquid flow in all directions. This produced the desired effect. He could expose himself to the sun without bringing on the fits of sneezing and the other disagreeable symptoms; and it was sufficient to repeat the treatment three times a day even under the most unfavorable circumstances. One treatment a day is enough if he goes out only in the evening. No vibrios are then found in the secretion. After treatment for some days the symptoms disappear completely, but the treatment must be kept up until the end of the time during which the attack would ordinarily make its appearance. In Professor Helmholtz's case this is, as before said, between May 20th and June 30th.—*Galaxy.*

Gynecology and Diseases of Children.

Puerperal Insanity.

BY W. W. GODDING, M.D.

The vagaries of lunacy, the varying phases of mental delusion, are interesting enough as a diversion, but are of very little concern to the practitioner. That "It has pleased God to form poor Ned a thing of idiot mind" hardly arrests our passing wonder why he made him at all; but the question, What can I do with puerperal insanity? may any hour in the day become a practical one to be decided by any one of us. Given the case; what will you do with it? Cases of puerperal mania, in the great majority of instances, either die within the first two or three weeks from exhaustion with typhoid symptoms, or recover somewhat rapidly, the excitement subsiding at the end of a few days or weeks, rarely continuing months. The exceptional cases neither die nor recover, but pass into chronic dementia. In the onset of the disease there are usually some slight premonitions of a wandering mind, but the nurse does not always remark them, and the explosion follows so soon that an outbreak of violence or destructiveness or obscenity may be the first intimation of what has happened. You find your patient up, walking about the room, or held in bed by two or three strong women, or, it may be, she is lying still, tearing her clothes, swearing, or pouring out a stream of obscenity so foul that you wonder how in her heart of hearts such phrases ever found lodgment. Now, what will you do with her? Many answer by promptly sending the case to a hospital, which I have no doubt is very often the best and only thing that can be done, though I have wondered if my considerable experience with typhoid exhaustion had any connection with this promptness. It is certainly to be gravely considered whether in the first few days after confinement, the risk of removal to a hospital at any considerable distance does not more than counterbalance any possible greater benefit to be derived from hospital treatment. Consider, too, before you send to the hospital, that that is a step which, once taken, can never be recalled out of her life. Treat the case at home, and should it terminate fortunately, the excitement subsiding in a short time, the memory of it in the minds of friends

will be of a sickness with some delirium, a little queer, as women often are after confinement. Send to the hospital, and, though the recovery is rapid and satisfactory, and the woman herself has rather a pleasant recollection of her convalescence, as is generally the case when the recovery is complete, still she has been insane, and this is never forgotten by her friends or her children; henceforward there is a certain dread of what may be in the future, a skeleton in the closet, not mentioned but always there.

So, the circumstances and condition of the patient justifying, you decide to attempt the treatment at home. You want good nurses who will not gossip, and who are not afraid. The points to be gained are rest in bed, sleep, nutrition. But your patient will not stay in bed: then make her do so. Do not wear out her strength and the patience of your nurses; provide a strong brown linen waist, made full in the bosom, fastening behind, with the sleeves closed at the end and prolonged a yard beyond the hands, then you have something soft and strong that can be tied together behind the back; sometimes you will not need to keep it tied; sometimes, even when tied, she will keep struggling out of bed, and it is a constant exertion for the nurse to keep her in; then pass sheets under the arms and lash her to the bed. Have no nonsense about the looks of the thing; here is one of the cases where "the life is more than raiment." Remember, it is a woman's existence you are trying to save, that typhoid exhaustion is waiting for you if you let her wear out her strength. Perhaps when fairly secured in bed she will go to sleep; that is the best possible result if it comes without hypnotics; if not, perhaps food will bring it. There is an imperative demand for a good supply of easily assimilated nourishment. The patient usually takes it irregularly, but tact on the part of the nurse will generally insure its being taken without enforced feeding. Milk I have found about as well taken as anything, which reminds me to say here, entirely out of connection, that you need have little concern about the milk in the breasts; a broken breast is the rarest event in puerperal mania; conservative nature closes this drain on the system at once without your interference.

But you do not get sleep with the administration of food, or from the horizontal position in bed; what then? You have bromide of potassium, chloral hydrate, morphia, including subcutaneous injections of the latter. I would try them in full doses in the order I have named. If they succeed, and they often will, partially at least, well; if not,

do not overpower the strength by cumulative doses of narcotics, they will not generally give what you are seeking; but darken your room, keep your nurses back, maintain the horizontal position, and dare to wait. It is wonderful how long sometimes the insane will live without sleep, and still recover. Watch the strength; if that keeps up, and the tongue and mouth are not very dry, food is better than stimulants. You will not, however, send away all the brandy simply because the woman has recently been confined. Milk punch will sometimes give the sleep you are seeking. Convalescence will not necessarily follow sleep; sometimes there is a fair amount of sleep from the start, but the excitement goes on. In most of these cases I have considerable faith in bromide of potassium, in doses of twenty grains, three times daily. I often give it with compound tincture of cinchona where there is lack of strength.

After you get the sleep, remember that a little time is almost always needed before much or any improvement appears; but no improvement showing after several days, you may then fairly feel that it is better to send to the hospital. Then state to the friends that the case is likely to be of some weeks' continuance, and when decided to remove, the sooner it is done the better. Your patient can probably travel with less risk than a week earlier, and you will have the consolation of having given the case a fair trial at home, and in many cases will, I think, have the satisfaction of seeing it recover there.—*Boston Medical and Surgical Journal*, October, 1874.

Case of Double Uterus and Vagina—Division of Vaginal Septum.

BY EUGENE C. GEHRUNG, M.D.

M. B., single, aged 17 years, menstruated for the first time about the age of 11 years. She consulted me February 9th, 1874, for a menorrhagic dysmenorrhea and profuse leucorrhea, which weakened her greatly. She also complained of habitual constipation and the passage of coagula towards the close of menstruation, and also of pelvic, abdominal, and thoracic pains.

Miss B. was previously under the treatment of a number of both regular and irregular practitioners, each of whom

gave a different opinion of her case. She received no benefit whatever from their treatment.

By a digital examination through a narrow hymen—which scarcely admitted my index-finger—I found a small cervix, continuous with a small and hard body, beyond and to the left of the vaginal wall. My first impression was that I had to deal with a left latero-flexion of an atrophied womb. The same impression was conveyed to the finger by rectal touch; but, on reaching higher up, two similar but larger bodies were found in continuity with the former, and arching right and left with a large sulcus between them. I diagnosed double uterus. The whole organ was retroverted, and the left cornu was found to lean heavily against the rectum. Searching for a second vaginal aperture I soon discovered a small fold of tissue at the site of the left portion of the hymen, into which a sound was passed, and with the index finger of the left hand in the right vaginal division, I proved that the septum was intact up to the ossa. On substitution—with some difficulty—of the middle finger of the same hand for the sound, I found that on each finger I could balance a complete and isolated neck, with a perfect septum between the fingers. The septum measured from one-eighth to three-sixteenths of an inch in thickness, and each cervix had a diameter of about half an inch. Probes were passed into both wombs to a distance of an inch and a half, but could not be brought into contact; on the contrary, they diverged.

The point of union of the two uteri does not exceed half an inch in diameter; their length is about two inches, and the diameter of the body of each is only about six-eighths of an inch. Vaginismus was present to such a degree that examinations or attempts at treatment caused spasmodic pains for several days. The vaginal septum required division for the following reasons:

1st. To remove the vaginismus.

2d. To remove the cause of the formation of the above-mentioned coagula; and,

3d. For the purpose of cleanliness, and especially the application of a pessary to correct the displacement.

I therefore proposed the division, which proposition was readily accepted and urged by Miss. B. and her parents. Consequently I operated on the 2d of June, assisted by my friends Drs. R. G. Buckingham and W. R. Whitehead.

Operation—After complete etherization the patient was placed in the left semiprone position of Sims, and a Sims speculum introduced into the right vagina. Traction on

the speculum made both vaginal apertures gape, and with a pair of long straight scissors, the septum was carefully cut. After reaching the cervices, the scissors were turned towards the Douglas cul-de-sac, and about half an inch more of the septum—which was prolonged in that direction—divided. There was no bleeding, beyond a little oozing. Two small but completely formed cervices uteri, each with a plainly perceptible os, were now exposed to view. At a subsequent examination during menstruation blood was seen to issue from each os.

After-treatment and Result—The patient was directed to remain quiet for a few days, to use twice daily an injection of a weak solution of permanganate of potash. The redundant tissue of the divided septum rapidly disappeared, and at the present date there is only a cicatricial elevation to be found at the lines of insertion of the former septum. By the use of a pessary (a modification of Hodge's closed lever), the retroversion was soon corrected, and the patient has had since a daily natural stool. Besides this, the pessary had the advantage of preventing reunion at the upper angle of the cicatrix—if there was any tendency to that present. A few mild applications to the mucous membrane of the cervices and vagina soon arrested the leucorrheal discharge. Dysmenorrhea ceased, the quantity of menstrual discharge has become normal, and no coagula have made their appearance at her menstrual period since the operation. In short, Miss B. is now in perfect health—*American Journal of the Medical Sciences*, October, 1874.

Sponge-Tent in Epistaxis.

Dr. James Young (*British Medical Journal* May 17, 1873) recommends the use of sponge-tent in cases of bleeding from the nose, and gives the following method of preparation: "Have a long piece of fine sponge, dipped in a solution of gum, compressed with twine, dried; and, after the twine has been unrolled, the sponge, is thickly coated over with the white wax. This is easily passed along the floor of the nostril, leaving a piece of red tape for extraction. The tent may remain for six hours, and must be gently rotated before extraction, to prevent fresh hemorrhage."

Public Health and Vital Statistics.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during August, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	334	33	28	31	3	20	17	S. F. B'd of Health.
Sacramento	28	5	4	1	0	3	2	Sac. B'd of Health.
Petaluma	5	0	1	0	2	0	0	Dr. G. W. Graves.
Dixon	3	0	1	0	0	0	0	Dr. A. H. Pratt.
Stockton	16	1	1	2	0	1	3	Stockton B'd Health.
Marysville	8	1	0	0	0	0	3	Dr. A. B. Caldwell.
Placerville	7	1	1	0	0	0	2	Dr. E. A. Kunkler.
San Diego	...	..	..	..	..	..	.	Dr. T. C. Stockton.
Oroville	2	0	0	0	0	0	0	Dr. J. M. Vance.
Los Angeles	29	3	3	2	0	2	0	Dr. H. S. Orme.
Truckee	4	1	0	1	0	0	1	Dr. Wm. Curless.
St. Helena	1	0	0	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	6	0	0	3	0	0	0	Dr. M. B. Pond.
Watsonville	11	3	2	0	0	0	0	Dr. W. W. Ross.
Folsom	2	0	0	0	0	0	1	Dr. S. Lyons.
Santa Cruz	4	1	..	3	..	..	.	Dr. C. L. Anderson.
Suisun, Fairfield	1	0	0	0	0	0	0	Dr. S. D. Campbell.
Colusa	6	0	0	1	0	0	2	Dr. Luke Robinson.
Trinity County	...	..	..	..	..	..	.	Dr. J. C. Montague.
Santa Barbara	8	4	0	0	0	0	0	Dr. C. B. Bates.
Redwood City and sur.	1	0	0	0	0	0	0	Dr. C. A. Kirkpatrick.
San Andreas	0	0	0	0	0	0	0	Dr. C. B. Robertson.
Auburn	...	..	..	..	..	..	.	Dr. A. S. Dubois.
Tulare County	...	..	..	..	..	..	.	Dr. M. Baker.
Siskiyou County	2	0	0	0	0	0	0	Dr. Daniel Ream.
Susanville and sur.	1	0	0	0	0	0	0	Dr. J. J. Sawyer.
Downieville	2	2	0	0	0	0	0	Dr. Alemby Jump.
Healdsburg	...	..	..	..	..	..	.	Dr. J. Bradford Cox.
Michigan Bluffs	...	..	..	..	..	..	.	Dr. J. L. Jackson.
Pajaro	2	1	0	0	0	0	0	Dr. Nichols.
Sierra City	0	0	0	0	0	0	0	Dr. L. F. Jones.
Oakland	21	..	..	..	..	..	.	Board of Health.
Antioch	0	0	0	0	0	0	0	Dr. M. C. Parkison.
Salinas and sur.	4	0	1	2	0	0	0	Dr. W. W. Davies.
Woodbridge and sur.	2	1	0	0	0	0	0	Dr. A. Trafton.
Cloverdale and sur	1	1	0	0	0	0	0	Dr. Q. C. Smith.
Yolo County	7	0	0	2	1	0	1	Dr. E. Parramore.

Remarks.—Our table shows a marked decrease everywhere, except in the towns located in the Sacramento and San Joaquin valleys. Here, as usual at this season, the effects of malaria are demonstrated in the prevalence of intermittent and other forms of fever; but, even here, the mortality is seen to be very light. To afford some idea of the mild character of the prevailing sickness, and the relative mortality, we give the following facts gathered from some of our correspondents: In an area of 12x15 miles, including Antioch, and containing a population of 2,000, and among thirty-one cases, seventy per cent. of which were of typhoid, remittent, and intermittent fevers, not a single death occurred this month. In Oroville, among forty-seven cases of the same nature as just mentioned, in the practice of one physician, the same results are reported; the two deaths noted in the table for that locality being from Syphilis in Chinese subjects. In Woodbridge and vicinity, of fifty-three cases treated by our correspondent, nearly one half were of remittent and intermittent fevers; the two deaths put down in the table being from consumption and meningitis. These facts not only testify to the mildness and amenability to treatment of our malarial fevers, but also put to fault the method of Dr. Playfair and others, at least for California, which attempts to establish a ratio of the sick to deaths, as twenty-eight to one.

THOMAS M. LOGAN, M.D.,
Permanent Secretary State Board of Health.

[We are indebted to the *Pacific Medical and Surgical Journal* for the figures in the Mortality Table of the State Board of Health, our own from Dr. Logan having been mislaid.—EDITOR.]

To do good to men is the great work of life; to make them true Christians is the greatest good we can do them. Every investigation brings us round to this point. If we could make each man love his neighbor, we should make a happy world. The true method is to begin with ourselves and so to extend the circle to all around us.

Monthly Report of Deaths Registered in San Francisco during October, 1874.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	....	....	....	....	....	....	..	....	....	....	....	....	....
Measles	....	....	....	....	....	....	..	....	....	....	....	....	....
Scarlatina	19	....	14	5	....	....	..	14	5	19	....	....	....
Diphtheria	5	....	3	2	....	....	..	3	2	5	....	....	....
Croup	2	....	1	1	....	....	..	1	1	2	....	....	....
Whooping Cough	7	....	7	....	....	....	..	2	5	7	....	....	....
Typhus and Typhoid Fevers	19	....	4	5	9	1	..	13	6	6	4	....	[illegible]
Diarrhœa and Dysentery	5	....	5	....	....	....	..	2	3	5	....	....	....
Cholera Infantum	8	....	8	....	....	....	..	5	3	8	....	....	....
Cholera Morbus	2	....	....	....	2	....	..	....	2	....	....	....	[illegible]
Pyemia and Septicema	....	....	....	....	....	....	..	....	....	....	....	....	....
Cerebro-Spinal Meningitis	3	....	2	1	....	....	..	3	....	3	....	....	....
Syphilis	1	....	....	....	1	....	..	1	....	....	....	1	....
Alcoholism	10	....	....	1	5	4	..	7	3	1	1	....	[illegible]
2—Cancer	8	....	....	....	5	3	..	2	6	....	4	....	[illegible]
Phthisis Pulmonalis	48	....	1	2	38	7	..	30	18	3	7	6	[illegible]
Hydrocephalus & Tubercular Meningitis	7	....	5	2	....	....	..	4	3	7	....	....	....
3—Encephalitis	14	....	10	1	2	1	..	9	5	11	1	....	[illegible]
Apoplexy and Paralysis	12	....	....	....	8	3	1	8	4	....	5	....	[illegible]
Convulsions	13	....	11	1	1	....	..	4	9	11	....	....	[illegible]
Other Diseases of the Nervous System	7	....	1	2	3	1	..	5	2	3	1	....	[illegible]
Aneurism	4	....	....	....	3	1	..	4	....	....	....	....	[illegible]
Diseases of the Heart	20	....	....	1	15	3	1	13	7	1	9	....	[illegible]
Pneumonia	10	....	5	1	3	....	1	5	5	5	4	....	[illegible]
Bronchitis	2	....	2	....	....	....	..	1	1	2	....	....	....
Other Diseases of the Respiratory Organs	4	....	....	....	2	2	..	2	2	1	....	....	[illegible]
Diseases of the Stomach and Bowels	10	....	6	1	2	1	..	5	5	7	1	....	[illegible]
Diseases of the Liver	6	....	....	....	4	2	..	3	3	....	2	1	[illegible]
Bright's Disease and Nephritis	2	....	....	....	2	....	..	2	....	....	1	....	[illegible]
4—Puerperal Diseases	4	....	....	....	4	....	..	....	5	....	....	....	[illegible]
Atrophy, Inanition and Old Age	38	....	30	....	1	2	5	21	17	29	4	1	[illegible]
5—Suicides	5	....	..	....	2	2	1	5	....	....	1	....	[illegible]
Deaths in Institutions	64	....	11	5	36	9	3	46	18	15	11	1	[illegible]
Still-Births	....	....	....	....	....	....	..	15	11	....	....	....	....
1—Zymotic Diseases	87	23.4	45	15	21	6	..	56	31	57	6	1	[illegible]
2—Constitutional Diseases	69	18.5	11	5	43	10	..	37	32	16	11	6	[illegible]
3—Local Diseases	109	29.3	35	8	49	14	3	64	45	42	24	1	[illegible]
4—Developmental Diseases	54	14.5	42	....	5	2	5	30	24	40	4	1	[illegible]
5—Deaths from Violence	23	8.2	2	2	12	5	1	22	1	4	4	3	[illegible]
Deaths from Unknown Causes: Chinese	30	8.1	1	....	27	2	..	27	3	....	....	30	....
Deaths from Unknown Causes: Others	....	.....	....	....	....	....	..	....	....	....	....	....	....
Total	372	.....	136	30	157	39	9	236	136	159	49	42	[illegible]
Per Cent. to Total Mortality	....	100.00	36.6	8.1	42.2	10.5	2.4	63.4	36.6	42.7	13.2	11.3	[illegible]

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Board of Health.

SAN FRANCISCO, October 30th, 1874.

The Board of Health met pursuant to call of the President. Present: His Honor, Mayor Otis, and Drs. Toland, Whitney and Simpson.

The clerk being absent, Thomas H. Reynolds was elected clerk, *pro tem.* The minutes of the previous meeting were read and approved.

The following reports were received, read and ordered to be placed on file, viz: Of William M. Lawlor, Resident Physician of the City and County Hospital; of S. R. Geary, Resident Physician of the City and County Alms House; of N. P. Foster, Assistant Physician of the Small Pox Hospital; of Charles Black, City Physician.

Inventories of property on hand at City and County Hospital, Alms House and Small Pox Hospital, on October 30th, 1874, were received and ordered to be placed on file.

Dr. Toland reported verbally that all the patients in his ward at the City and County Hospital were progressing favorably.

Dr. Blach, City Physician, stated that the Receiving Hospital in the City Prison had been completed, and was now in daily use.

Dr. Toland stated that he had learned that burials at the City Cemetery were made at the depth of only two feet, and moved that the matter be referred to the Health Officer to investigate and report, which was carried.

Demands for salaries, etc., were presented by the Finance Committee, and, on motion, allowed and ordered paid.

His Honor, Mayor Otis, stated that he had been informed that the Health Officer had no authority to grant permits to parties desirous of entering the City and County Hospital, and asked if such authority should not be given him. Discussed by Drs. Toland, Whitney, Simpson, Lawlor and Gibbons, and no final action taken.

Dr. Lawlor called the attention of the Board to that portion of his report referring to the number of outside

patients treated by the Physicians of the City and County Hospital, and stated that from five to ten persons were every day refused admission on the grounds that they were not proper subjects for treatment in the Hospital, but merely required advice and medicines.

Also recommended that the salary of the driver of the ambulance be increased from $40 to $50 per month. On motion the clerk was instructed to transmit a communication to the Board of Supervisors, recommending that said increase be made.

On motion the Board adjourned.

Mortality Statistics.

[We extract the following from the *Chicago Medical Examiner*.—EDITOR.]

It is said that when a disease is once recognized it is half cured. This is rather a consoling maxim, and it is almost the sole consolation left us when we survey the record of deaths among the children of this city during the hot season just past. We have compared the mortality statistics of Paris, London, Lyons and Chicago in the appended table, for the month of July, since that is the month during which the fatality from cholera infantum is, with us, the greatest. We are unable to specify the precise per centage of deaths from this disorder in each city, since cholera infantum is not tabulated in all of the foreign bulletins, but the aggregate of fatality from bowel affections in summer must be largely due to infantile disorders.

However humiliating it may be to confess our weakness in this particular, it is certainly well to recognize it. The story told by the accompanying table bears its own moral, and suggests a problem whose solution is incumbent upon every medical man in Chicago.

MORTALITY IN THE CITIES OF PARIS, LONDON, LYONS AND CHICAGO, FOR JULY, 1874.

| CITIES. | Population. | Latitude. | Longitude. | MORTALITY OF SPECIAL DISORDERS. | | |

Scientific Proceedings.

SAN FRANCISCO MICROSCOPICAL SOCIETY.

A Paper by Dr. Harkness on Fungi—Donations to the Cabinet.

The regular meeting of this Society was held on Thursday evening, with Dr. Mouser in the Chair, and was well attended by the members.

Mr. Wm. Norris was present as a visitor.

Mr. W. R. Barbour was elected a resident member of the Society.

Under the head of donations, was presented, with a variety of fungoid growth, a slate, with the following note:

"MESSRS. EDITORS ALTA—*Gentlemen:*—I send you what I consider a great curiosity in the form of a slate, taken from a case which had been wet, the surface of which presents the appearance of a beautifully drawn sketch of some vegetable; perhaps a new creation, *a la* Tyndall. It has the appearance of being drawn by some patient, plodding artist, but actually drawn in the dark while packed together and chinked with saw-dust. Yours, etc.,

"CHAS. P. KIMBALL."

Dr. Harkness exhibited a portion of the fungus taken from one of the branches, which was spread over the surface of the slate in beautiful dendritic form, and which he stated was a variety of Penicillium.

Dr. Burgess donated a slide, mounted by him with spindle-shaped cells, found in a Sarcomatous tumor.

Mr. Kinne donated two slides, mounted by him with arranged diatoms, being the arachnoidiscus ehrenbergi, found on sea fern, and mounted in balsam, the delicate workings of which were shown beautifully with the spot lens; also the anther in Kentucky blue-grass, showing the minute cell structure.

Dr. Harkness read the following paper, giving a description of a fungus found on the scorched willows in San Mateo county, and which was presented to the Society by Dr. Cooper at its last meeting, supplementing the same by oral descriptions of fungoid growth, using the yeast plant and mushroom, which he exhibited under the microscope, to illustrate the subject.

DR. HARKNESS' PAPER.

Gentlemen:—At the last meeting of your Society a specimen of fungus found attached to a gummy exudation upon the trunk of a willow was submitted to me for examination. Having given the subject a somewhat hasty examination I offer the following report:

The willow gum on which the plant was discovered is of a dark red color, is readily soluble in water, but insoluble in alcohol, and contains a considerable amount of salicine. Some few shrunken threads of mycelium are still to be traced upon its surface, it, of course, having served as the parent of the plant.

The enlarged filamentous hyphæ is, however, the portion of greatest interest.

The hyphæ is of a bright orange color of an inch or more in length, and is enveloped in a gummy substance analagous to that on which the plant is found.

This gummy envelope is not soluble in alcohol, while in water this, together with the cell structure of the plant, is rapidly dissolved.

The structure of the plant is not readily made out. By allowing glycerine to flow under the covering glass, using the spot lens and a $\frac{1}{4}$ objective, a faint trace of spiral tubes may be detected running through the long diameter of the plant.

Treated in the same manner under a $\frac{1}{2}$-inch objective, indications of transverse striæ become apparent, marking the boundaries of cells. On applying a strong tincture of iodine these striæ become still more conspicuous. In almond oil slight traces of imbricated cells of the epiderm appear.

Its method of growth is doubtless analagous to that of all other plants of this genus.

Its method of reproduction is by conjugation, as it would appear, although I am unable this evening to demonstrate the actual presence of the exhausted male plant. My conclusions, however, are based on the following facts: On placing a portion of a filament on an uncovered slide with the half inch objective and adding water, the plant immediately begins to swell and slight protuberances appearing on one side, corresponding to those seen in the Zygnema and other varieties of the conjugating confervæ. As the gummy envelop is dissolved away from the protuberances, motile gonidia spores are discharged in enormous numbers. In this experiment we obtain no further proof (except by

the appearance of the protuberances) of the existence of the male plant. In the confervæ, we see the cells, exhausted of their protoplasm, lying at an appreciable distance from those of the spore producing plant. In the present instance the exhausted cell is in such complete contact that the moisture which acts on the one, instantly obliterates the other. If we use acetic acid in the same manner as in the preceding experiment, we find that the acid acts still more energetically than water, and on the instant of disruption we may occasionally catch a glimpse of the two bodies flying away in opposite directions.

The gonidia spores are exceedingly minute, oblong in shape, and in their shortest measurement being less than a twenty-thousandth of an inch in diameter. With a half or a fourth objective and spot lens, if we allow glycerine and camphor water to flow gradually under the covering glass, the action is less violent, and we may at our leisure observe the spores as they swim away in the fluid propelled by their moving cilia. Aside from their scientific value, they form a very pleasing picture as the glinting light plays upon their sides with every change in position. I am unable to class the plant with any described variety, yet I dare not say that it is new to science. The characteristics which I have described, however, would seem to preclude the possibility of its complete development in any other than a dry climate.—*Alta.*

PACIFIC MEDICAL COLLEGE.

Commencement Exercises Last Evening—Seven New Doctors—The Valedictory by Dr. Henry Gibbons, Sr.

The Pacific Medical College held the annual commencement and graduating exercises last night, at Calvary Church. The weather was anything but inviting, yet a goodly number of friends and members of the profession paid their meed of respect by attending.

Dr. Henry Gibbons, Jr., presided, and introduced Rev. Dr. Scott, who invoked a blessing and prayed the success of the young aspirants for medical preferment.

In the absence of Gov. Haight, who had been appointed to confer the degrees, the Rev. Dr. Burrow, D.D., was

assigned the duty, and pronouncing the Latin formula handed each of the following candidates the parchment which constituted him a member of the medical profession: M. M. Chipman, Geo. Gerlach, John Leffler, Phillip Maas, Julius C. Morse, John Parker, A. L. Prevost, and J. B. Robertson.

Dr. Henry Gibbons, Sr., of the College Faculty, was next introduced and delivered the valedictory on behalf of the Professors.—*Alta.*

Editorial.

Note to the London "Lancet."

GENTLEMEN:—In your issue of October 24th, 1874, page 603, we find the following discourteous and untrue lines, dictated, we sincerely believe, under the influence of unreliable information, which you should have tested before you believed; and which we equally sincerely think you will gladly retract, when, through such resources as you may yourself command and rely upon, you shall discover to be false, and unworthy the high reputation you bear. The noblest man may be deceived, but his nobleness may wane if he persist in error when told the truth:

"We notice that the San Francisco correspondent of the *Morning Advertiser* recently referred to this subject, and quoted largely from the *San Francisco News Letter*, whilst expressing his astonishment that the three quacks who headed the list are "professors of the State University." Our knowledge of Californian medical matters is not very profound, but we should be surprised if the "Medical Department of the University of California," with which these worthies are connected, is anything more than an institution of their own invention—probably of the "anatomical museum" type—which has no State recognition whatever."

The high reputation and influence of your journal is too potential to permit your utterances to be ignored, as in

this case they merit; but your hot haste to perpetrate wrong and display your high superiority should have been tempered with some discriminating investigation. Did you inquire, gentlemen, into the reliability of the San Francisco correspondent to the *Morning Advertiser* who quotes so largely from the San Francisco *News Letter?* Have you informed yourselves of the sincerity of purpose and disinterested devotion to the public weal of the San Francisco *News Letter?* If you did not take such precaution before inflicting a scandal upon the Medical Department of the University of California, then did your reviewer dip his pen in unclean ink.

You candidly confess that your "knowledge of Californian medical matters is not very profound." Would you not have done honestly to have sharpened your dull razor before trying to cut your neighbor's throat? Previously to slopping over with surprise, if the Medical Department of the University of California is anything more than an institution of the Museum type, invented by certain "worthies," and having no State recognition whatever, would it not have been decently respectable in you—assuming such exalted censorship—to have asked some one, less ignorant, about the status of the University of California, its endowment, its noble exertions to establish a high standard of education for a State just new-born and remote from *your center of light?* and also learn the relationship to it of its own elected Medical Department? Had you so acted, you would have been informed precisely the reverse of your statements, and been spared your ominous surprise.

In a word, while you acknowledge your ignorance, you confess to being *surprised* into error by a wily malcontent and unscrupulous mischief-maker. We cheerfully acknowledge your liability to be the victims of deception, but equally deprecate your denouncement of an honorable institution without proof of the loyalty of your evidence. Before you seek to stamp out with the boorish heel of a rustic the emulation of an aspiring college, might you not

condescend to inquire if the early history of your own collegiate institutes is free from blemish or censure? and if the learning of the founders of scientific schools in London, Edinburgh and Dublin could compete in literary attainments and medical lore with the erudite reviewer of the *London Lancet?*

We confess that the refined "old English gentleman," classic in his taste, pure in his purpose, noble in his perceptions, elegant in his manners, and learned in his profession, is a rarity with us; but the refugiate Anglo snob, sneering at whatever is not of London derivation, is like the outcast hawklet, forever found hovering over every domestic poultry yard.

Medical Diplomas.

In the August number of the WESTERN LANCET we invited the attention of the Regents of the University of California to a suggestion to organize a legal registration for all diploma-bearing medical men in California. We now republish from the *Medical Record*, of New York, November 2d, No. 213, page 584, the statutes now in force in New York County. We hope thereby to aid in the enactment of similar laws for California.

The New York enactments are very crudely elaborated. For California we bespeak but one form of degree, and that to emanate from the University of the State, (without disparagement, however, to any college already chartered) but spare us all licenses from medical societies, pseudo-colleges, and every kind of doctor factories. Licenses are with difficulty discriminated by the public from diplomas, and once obtained are flaunted forth with unreserved boldness:

The undersigned Censors of the Medical Society of the County of New York, direct the attention of all practitioners

of medicine or surgery in the County of New York to the following

Act to Regulate the Practice of Medicine and Surgery in the State of New York, passed May 11th, 1874.

CHAPTER 436.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every practitioner of medicine or surgery in this State, excepting licentiates or graduates of some medical society or chartered school, shall be required, and they are hereby commanded to obtain a certificate from the censors of some one of the several medical societies of this State, either from the county, district, or State society, which certificate shall set forth that said censors have found the person to whom it was issued qualified to practice all of the branches of the medical art mentioned in it. And such certificate must be recorded in a book provided and kept for the purpose by the county clerk of each county in the State.

SECTION 2. The censors of each medical society aforesaid shall notify all practitioners of medicine and surgery of the terms and requirements of this act, and shall request such persons, so notified, to comply with those requirements within thirty days after such notification; and if such persons shall not within the time specified in the notice, or within such further time as may be allowed by special arrangement with said censors, not exceeding ninety days, comply with the requirement herein made, of physicians or surgeons, as the case may be, such persons shall thereafter be subject to all the provisions and penalties prescribed by this act for any violation of the same, and the president of the society making such request shall, and he is hereby required to, at once commence the proceedings authorized by this act against such person.

SECTION 3. It is hereby declared a misdemeanor for any person to practise medicine or surgery in this State unless authorized so to do by a license or diploma from some chartered school, State board of medical examiners, or medical society, or who shall practise under cover of a medical diploma illegally obtained; and any person found guilty of such misdemeanor shall for the first offence be fined not less than fifty nor more than two hundred dollars. For any subsequent offence, not less than one hundred nor more than five hundred dollars, or by imprisonment not

less than thirty days, or by both imprisonment and fine; and all such fines shall go into the county treasury of the county bringing such action.

STATE OF NEW YORK, }
Office of the Secretary of State. } ss:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of the said original law. DIEDRICH WILLERS, JR.,
Secretary of State.

In accordance with the above, every person practising medicine or surgery in the County of New York, who is not a licentiate or graduate "of some chartered school," and who desires to obtain a license from the Medical Society of the County of New York, is requested to make application within thirty days to the undersigned Secretary of the Board of Censors.

To aid the Censors in the discharge of the duty imposed upon them by the above law, every practitioner who is in possession of a license or diploma is hereby requested to fill out the annexed blank, giving full name and residence, place and date of graduation or name of society granting license with date of same, and forward it promptly to the Secretary of the Board of Censors.

JOHN C. PETERS, M.D.,
ABRAHAM JACOBI, M.D.,
GOUVERNEUR M. SMITH, M.D.,
ANDREW H. SMITH, M.D.,
H. T. HANKS, M.D.,
Censors.

H. T. HANKS, M.D., Secretary.
149 Lexington Avenue.

Name in full.....
Residence.....
College or University granting Diploma.....
Society granting License.....
Date of Diploma or License.....

Medical Department of the University of California.

The annual Commencement of this College for the session of 1874 was held at the Pacific Hall on Thursday evening, October 29th, 1874.

The exercises commenced at 8 o'clock, P.M. Present, Professor Gilman, President of the University of California, and representatives of the Board of Regents of the University of California, Rev. Horatio Stebbins and Mr. Hallidie; Professors Toland, President of the Medical Department, Logan, O'Neil, Bates, Deane, Bradbury, Rising, Martinache, Brigham and Stout. Rev. Doctor Lathrop acted as Chaplain. Orator, W. H. Rhodes.

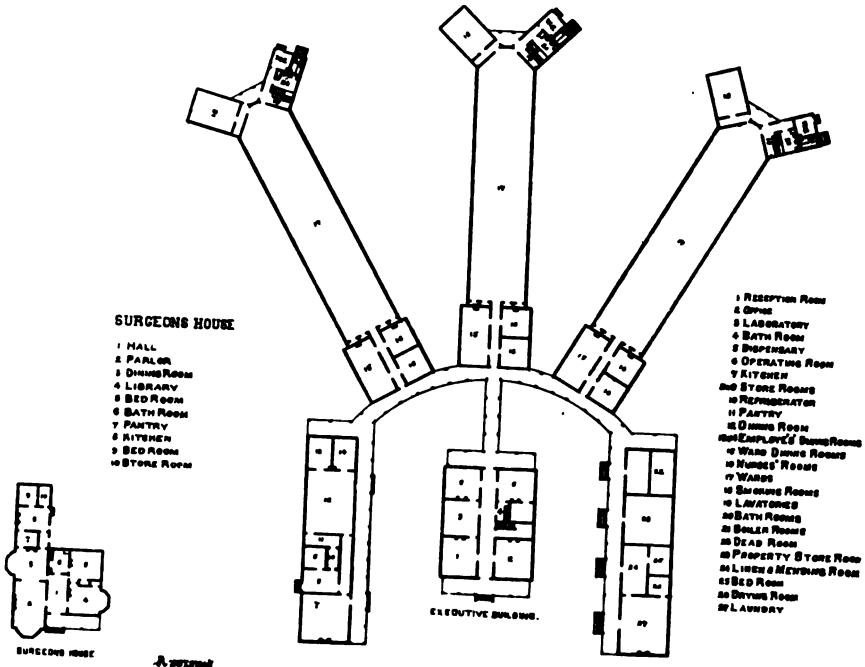
The Valedictory Address for the Faculty was delivered by Thomas M. Logan, M. D.; the Valedictory Address for the graduates by R. A. McLean.

Graduates: James W. Blake, Frederick P. Biggs, Francis Delmont, Young E. Hicks, Wm. P. McDermott, R. A. McLean, Charles F. Miller, George E. Nottage, James W. Waters.

Our space does not allow even an abstract of the eloquent oration presented. The admirable address of Professor Logan is now in print, and those who, by distance in the hall from the speaker, could not well hear his words, can obtain a copy through the editor of the WESTERN LANCET.

United States Marine Hospital.

The accompanying diagram of the United States Marine Hospital, kindly furnished for the WESTERN LANCET by Supervising Surgeon Jno. M. Woodworth, M. D., will recall attention to his article on Hospital Construction in our October number. This Hospital is fast approaching completion. At a cost of $58,000 an exceedingly commodious series of buildings, according to the plans, will be obtained, but to complete the work in sewers, water-supply, fences, and the suitable arrangement of the grounds and cultivation of trees, it will be necessary patiently to abide the pleasure of Congress, at its next session, for further appropriations. By invitation of the Superintendent, Mr. S. McCullough, we yesterday visited the institution. Facing the east, it



Approved

Supervising Surgeon

BLOCK PLAN
OF
U.S. MARINE HOSPITAL
SAN-FRANCISCO, CAL.

Supervising Architect

H. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

commands an eminently picturesque view. The surrounding undulating lands invite improvement and ornamentation. A road constructed around the fairy little crescent-shaped lake will open fine exercise grounds for the patients; and Mount Devisadero, to the east, surmounted with our Christian emblem illumined by the rays of the rising sun, may animate their minds to the devotion which such circumstances will inspire. The water of the lake is not now considered wholesome, and wells are required for the present supply. It is possible also that malarious emanations from the lake may at the outset occasion some fever or diarrhœa, but when the lake is improved by dredging away the marsh accumulations, and the water improved by better drainage, these objections will doubtless disappear.

The Insane Asylum at Napa, State of California.

We learn that the legal Commissioners, Dr. Morse, of San Francisco (resigned), Messrs. Jewett, of Marysville, Hartshorne and Goodman, of Napa, and Sterling, of San Francisco, have appointed Edwin Bentley, M.D., U.S.A., to the highly responsible office of Resident Physician of that institution. Notwithstanding the acknowledged merit and ability of other aspirants, Dr. Bentley has won the preference. It is fortunate for California that there are several worthy pretenders to this office, but we feel satisfied that in this case, to the honor of the State, no mistake has been made, nor has political party rewarded a political stumper by a State gift. Dr. Bentley will, we believe, be acceptable to the profession in his honorable office, for his qualities of scientific enthusiasm and individual disinterestedness are acknowledged. His industry, his ambition to excel, his desire to improve himself and his willingness to impart instruction, together with an administrative aptitude learned by discipline under military order, are guarantees that the Asylum under his care will not only be a boon to the afflicted insane, but an invaluable source of pathological research in mental diseases.

Obituary.

It is with much sorrow that we announce the death of Mr. John C. Le Conte, the son of Professor John Le Conte, of the University of California. It is peculiarly painful that the same journal, while hailing with joyfulness the entrance of nine students to their professional career, full of hope, health and ambition, should be called upon to record the demise of one of their fellow-students, equally inspired with professional ardor. We are not yet informed of the details of his illness, but believe that pulmonary disease was the cause of death. His loss will be deeply lamented by his instructors, who foresaw in his talent the promise of distinction; and by his fellow-students, who loved him for his agreeable, social qualities. We hope our symyathy may bear some consolation to his afflicted parents.

The Public Health Association.

PHILADELPHIA, November 11th.—The session of the American Public Health Association was continued to-day. Interesting papers were submitted by Doctor Hunt of New York. Doctor Harris of New York, Doctor Buzzy of Washington, Doctor Toner of Washington, Doctor Snow of Rhode Island, Doctor Brown of the United States Navy, and Doctor Rodenstein of New York. The attendance was large.

The first paper read this morning was by Doctor E. M. Hunt of New York, on building ground in its relation to health. Professor Hart of Philadelphia made a few remarks on the lack of attention to drainage of sewers in the latter places, and the evils likely to arise therefrom, and at his suggestion a Committee was appointed to investigate the subject. Doctor Buzzy of Washington read a paper on gathering and transportation of fruit and vegetables.—*Alta.*

BEAUTIFUL lives have blossomed in the darkest places, as pure white lilies full of fragrance on the slimy, stagnant waters.—*Duff Porter.*

American Health Association.

PHILADELPHIA, November 12th.—The session of the American Public Health Association was continued to-day. The election of officers and appointment of Committees was on motion postponed till to-morrow. Several important papers were read during the session this evening, among them a paper by Doctor Stephen Smith, entitled "Reciprocal Relations of Public Health Service and Highest Educational Qualifications of the Medical Profession." A paper by Doctor Frederick R. Sturges, of Philadelphia, on the relation of syphilis to public health, was read; also a paper by Doctor Beard, of New York, on hay fever or summer Catarrh, and a paper by Doctor John C. Peters, of New Jersey, upon the stealthy introduction and spread of infectious diseases in large cities. The session to-night was well attended. Several papers on various subjects in relation to diseases were read.—*Alta.*

The Metric System.

Pay Director Cunningham, of the United States Navy, has presented to the National Medical College of Washington City a full set of the Metric System of Weights and Measures. Throughout the civilized world there is an almost entire use of uniform weights and measures. France, Holland, Belgium, Spain, Portugal, Italy, Switzerland, the whole German Empire and Austria, use the metric system. England and the United States are the only two great countries that stand in the way of its universal adoption.—*Alta.*

Miscellaneous.

CALIFORNIA OPIUM.—Mr. John M. Maisch, of this city, has examined some specimens of California opium, and reports that it is nearly the strength of opium as directed by the pharmacopœia. The high price of labor in California, it may be supposed, renders the cultivation of the poppy solely for the production of opium unprofitable; but the seeds contain a large percentage of a bland fixed oil, and after its expression are valuable as feed for cattle; poppy

culture may, therefore, notwithstanding the drawback of high wages, not prove unprofitable. The opium received was more homogeneous in texture than Smyrna opium, of a good strong narcotic odor, and unexceptionable in its physical properties.—*The Medical and Surgical Reporter.*

Book Reviews.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE: A Handbook for Students and Practitioners. By Henry Hartshorne, A.M., M.D., Professor of Hygiene in the University of Pennsylvania, etc. Fourth Edition, thoroughly revised, with one hundred Illustrations. Philadelphia: Henry C. Lea. 1874.

This 8vo. of 526 pages, from Messrs. Bancroft & Co., with its useful Formulæ, dietetic list and universal brief survey of the whole domain of Medicine, has been so universally praised by the press that we cannot hope to enhance its appreciation by those who seek to obtain in small form all the inspissated juice of heavy works. The author has made an excellent condensation. His perceptive eye has embraced the entire field of operations, and he has given to his staff officers a clear view of the general intent; but, then, he must confide in their knowledge of the details of the science of war to fill up the minutiæ of the campaign. As the author, however, confines himself to the "essentials," he has eminently well succeeded. His resumé of recent researches in the pathology of Tuberculosis is full and ample, although he has not fully appreciated the exhaustive study of Buhl. His chapter of page 47, on the "Nervous System and its Diseases," is a broad review of the field of research now attracting the highest histological and pathological research.

SURGICAL EMERGENCIES: TOGETHER WITH THE EMERGENCIES ATTENDANT ON PARTURITION AND THE TREATMENT OF POISONING. A Manual for the use of general Practitioners. By William Paul Swain, F.R.C.S., Surgeon to the Royal Albert Hospital, Devonport. With

eighty-two Illustrations. Philadelphia: Lindsay & Blakiston. 1874.

This is an illustrated work of 183 8vo. pages, well prepared to illustrate the impromptu operations which the surgeon is called upon to perform. It serves the purpose of the orator who always keeps an impromptu speech in his hat for occasions when unexpectedly called upon at a public meeting. All it contains, however, is found in the works on general surgery. Address A. L. Bancroft & Co. for this work.

ARCHIVES OF DERMATOLOGY. October, 1874.

We extract the following from the above pamphlet:

NERVOUS AND VISCERAL SYPHILIS.

E. L. Keyes, M.D.

1. Althaus—Case of infantile syphilitic epilepsy.—*Medical Times and Gazette*, April, 1874, p. 398.

2. Broadabent—Syphilitic affections of the nervous system.—*Lancet*, 1874, Nos. 2, 4, 6, 8, January and February.

3. Bruberger—A case of syphilitic meningitis, with remarks on syphilis of the central organs. *(Ein Fall von meningitis syphilitica nebst Bemerk. uber syphillis der centralorgane.)—Virch. Archives*, May, 1874, p. 285.

4. Buzzard—Case of general syphilitic paralysis.—*Medical Times and Gazette*, April, 1874, p. 413.

5. Buzzard—Syphilitic nervous affections.—*Monograph*, 8vo, pp. 148. London: Churchill, 1874.

6. Cadell—Case of mental excitement during the secondary stage of syphilis.—*Journal of Mental Science*, January, 1874, p. 564.

7. Jones, H. W.—Syphilis, hemiplegia, aphasia, recovery.—*Chicago Journal of Nervous and Mental Diseases*, January, 1874.

8. Newington—Case of insanity dependent on syphilis.—*Journal of Mental Science*, January, 1874, p. 555.

9. Reder—Contributions to syphilitic affections of the central nerve system. *(Beitrage zur Casuistick syphilitischer Affectionen des Central-Nervensystems.)—Veirteljahresschr. fur Derm. u. syph.*, p. 29, 1874, I Heft.

10. Robertson—(Alexander.) Epileptic aphasia and hemiplegia; colored vision; syphilitic (?) origin. —*British Medical Journal*, April 18, 1874, p. 515.

11. Roof—A case of insanity from syphilis.—*Philadelphia Medical and Surgical Reporter*, February, 1874, p. 201.

12. Luke—Two cases of syphilitic insanity.—*Journal of Mental Science*, January, 1874, p. 560.

13. Wilks, Samuel—Two cases of insanity dependent on syphilis.—*Journal of Mental Science*, April, 1874, p. 38.

Althaus' case (1) *of infantile syphilitic epilepsy* is interesting from two points of view: first, because the nature of the malady not being at once made out, long-continued treatment was ineffective, while prompt, and, it appears, a radical cure followed a correct diagnosis and the use of the iodide of potassium; and secondly, because the case was one of inherited syphilis, although the boy was nine years old.

These Lettsomian lectures of Broadabent (2) *on syphilis of the nervous system* are garnished with some well-observed illustrative cases, and represent pretty accurately the present state of our knowledge of the nervous symptoms due to syphilis. Broadabent maintains the opinion that it is chiefly where the secondary symptoms have been light in character or even absent, or where tertiary symptoms arrive very early that nervous symptoms appear; citing Gros & Lancereaux, Braus, Buzzard and Moxon, in corroboration of this opinion. He draws attention to local syphilitic sclerosis of the cord of the posterior columns as causing locomotor ataxia; of the anterior wasting paralysis; but expresses a strong doubt as to syphilis being by any means a common cause of these affections, especially the latter. Broadabent believes that acute general or local myelitis may be caused by (especially secondary) syphilis, and that spinal meiningitis due to syphilis is less common than myelitis from the same cause. Special attention in connection with cerebral syphilis is directed to double optic neuritis, hemi-spasm, and disease of the walls of the vessels leading to thrombosis. The intellectual and emotional manifestations of brain syphilis are only touched upon lightly, while no mention is made of the recent localization of specific pathological changes upon the sympathetic nerves and ganglia by Petrow.

Bruberger (3)—*Syphilitic Meningitis.* This patient, aged 30, two years after infection, without previous headache, fell suddenly in the road while walking, and remained some minutes unconscious. He recovered and was not paralysed, but rapidly became weaker and weaker until in eight days he had lost all power of muscular motion, being unable

to move even the fingers or toes. Sensibility and intelligence, perfect; no pain; electrical excitability scarcely diminished; pupils, normal; slight sensitiveness on pressing the skull; none elicited on pressing the spine. Treatment failed. The patient got bed sores, perineal abscess, etc., the sphincters relapsed, and he died. Autopsy revealed meningitis in the cervical portion of the chord, the membranes being thickened, matted together, and adhering to the substance of the cord and to the bone. There were hemorrhages into this region of the cord, atrophy of the grey substance, and increase in size of the central canal. There was extensive basilar meningitis, the pia being thick, grey and gelatinous. The walls of the vessels of the brain were thickened and knotty. It is noticeable in this case that with these extensive lesions there were no paralysis of special nerves, no convulsions, *no pain*, and that the sensibility of the whole surface was intact.

In this case of Buzzard's (4), æt. 46, there was *general syphilitic paralysis* of both extremities and of the facial nerves, incomplete paralysis of respiration, deglutition of the right sixth nerve, and general cutaneous anathesia. The attack came on gradually, and no positive history of syphilis could be gained. Ten-grain doses of iodide of potassium produced improvement in twenty-four hours. The dose was run up to ʒ j, some subcutaneous injections of chloro-albuminate of mercury used, and in less than six months the patient was entirely well.

No. 5 is an excellent text-book for popularizing much needed knowledge of the subject of *syphilitic nervous affections.*

The interest in the first of the two cases of Reder (9) consists in the fact that locomotor ataxia was the malady ascribed to syphilis, that it yielded promptly to treatment, but as the latter was seemingly always suspended when the symptoms ceased relapse followed relapse, until finally, the symptoms became very severe, failed to respond to treatment, and the patient became a permanent cripple.

14. Barety—Atrophy of the interosseous muscles of the hand in two syphilitic patients. *(Observation d'atrophie des muscles interosseux de la main chez deux syphilitiques.)—Annal de Derm. et de Syph.*,1873-4, Nos. 3 and 4.

15. Kunze—Syphiloma of the liver and porta hepatis. (*Syphilome der Leber und Porta hepatis.*)—*Deutsch. Zeitschr. f. pract. med.* 12, p. 102, 1874.

16. Mauriac—Early gummy syphilides resisting iodide of potassium. (*Syphilis gommeuse precoce et refractiare a*

l'iodure de potass.)—*Gazette des Hop.*, June 11, 18, 23, 25, and July 2, 1874.

17. Stewart, T. Granger—Case of waxy and syphilitic disease of the liver, with ascites; recovery after frequent tapping. — *Medical Times and Gazette*, January, 1874, p. 121.

18. Thierfelder—Syphilis of the liver. (*Syphilitische Lebernarbe. Syphilis der Leber.*)—*Atlas der path. Histol., Leipzig*, 1874. 3d *Lief. Tafel* xvi, figs. 2 and 2 a, and *Taf.* xvii, figs. 3, 3 a, and 4.

19. Thierfelder—Syphilis of the lung. (*Syphilis der Lunge.*)—*Atlas der path. Histol Leipzig*, 1872, 1 *Lief Tafel* v, fig. 3.

20. Weil—Tumors of the spleen, early in syphilis. (*Ueber das Vorkommen des milztumors bei frischer syphilis*) —*Centralbl. fur d. Medical Wissenschaft*, 1874, 12. p. 177.

21. Weil—Splenic tumors in syphilis, and percussion of the spleen. (*Ueber das Vorkommen.....nebst Bemerk. uber die Percussion der milz.*)—*Deutsch, Archiv. f. klin. med.*, May 15, 1874.

ACKNOWLEDGMENTS.

THE UTICA DAILY OBSERVER, October 3d.

THE IRISH HOSPITAL GAZETTE, Dublin, October 1st, 1874.

ADDRESS ON OBSTETRICS. Delivered before the Medical Society of the State of Pennsylvania by William B. Atkinson, M.D., etc., Philadelphia, May, 1874.

THE SANITARY JOURNAL. Devoted to Public Health. Editor, Edward Playter, M.D. Volume 1, No. 2. Toronto.

CONSTITUTION AND BY-LAWS OF THE MEMPHIS MICROSCOPICAL SOCIETY. Organized August, 1874.

TENNITUS AURIUM, OR, NOISES IN THE EARS. By Laurence Turnbull, M.D., Physician to the Department of Diseases of the Eye and Ear, Howard Hospital, Philadelphia.

THE AMERICAN JOURNAL OF OBSTETRICS, AND DISEASES OF WOMEN AND CHILDREN. Quarterly, November.

Our regular exchanges.

THE

WESTERN LANCET:

A JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

FOR DECEMBER, 1874.

Original Communications.

Varices.

BY H. H. TOLAND, M.D., SAN FRANCISCO.

This is an exceedingly common disease, and consists of a thickening and dilatation of the coats of the veins. This difficulty occurs in the veins of the legs, in the hemorrhoidal, the spermatic, as well as in many of the superficial veins of the body—as the abdominal, when the vena cava is obstructed. When a hereditary predisposition exists, the veins of the leg may enlarge by the use of tight garters, by the pressure of the gravel uterus, and by remaining too long in the erect position. Whatever hinders or retards the circulation of the blood in the veins produces a dilatation, and generally a thickening of the coats as well as an extraordinary elongation. In a short time, in consequence of the irritation of the skin produced by the pressure of the enlarged veins, eczema appears, which is always accompanied by so much itching that the patient frequently

tears off the skin and establishes an ulcer which cannot be cured without removing the cause.

These ulcers are called varicose, and, as no inconvenience results from the obliteration of the superficial veins, they are curable. The circulation is re-established by the dilatation of other branches. Even when the inferior vena cava is obliterated the lower portion of the vessel as well as its branches dilate, such as the superficial abdominal or azygos, which carry the blood to the heart. When veins enlarge without supplying the place of some obliterated vessel or vessels, they are varicose, and, not only useless, but hurtful. As early as 1532 the disease was recognized and described by Paulus Ægineta.

True varices are generally found in the bladder, rectum, spermatic chord, and the lower extremities. The deep-seated veins often become dilated before the superficial enlarge and produce pains in the legs, as well as a want of power, produced by the pressure made upon the nerves by which the parts are supplied. Certain conditions of the system favor the production of this disease.

As already mentioned, the coats of the dilated vein generally become thickened, greatly elongated, and consequently tortuous. So soon as the valve cusps lose their power the dilatation and elongation increase very rapidly, which is soon followed by eczema and ulceration. The feet are generally swollen and cold, particularly if the patient remains long in an erect position.

The internal saphena vein is more frequently affected than the external ; occasionally the dilatation of this vein is irregular, and the coats become so thinned by the distension that they yield to the weight of the column of blood, which may cause a fatal hemorrhage. Sometimes the vessels become so distended that the blood coagulates, which obliterates the vessel permanently and effects a radical cure. When the distension is sufficient to produce inflammation pus may form in the vein in a sufficient quantity to require an incision to enable it to escape.

Varices of long standing have generally been regarded as inveterate. In the only cases that have been cured, the

result was obtained by imitating nature as nearly as possible; or, in other words, by producing a coagulation of the blood in the veins, which will always, for a time at least, afford relief. I have operated frequently, and in many cases the disease was permanently cured, but, occasionally, other veins became enlarged, which required a second operation. For many years I have used the toilet pin; and whenever blood followed the introduction of the pin it was removed, in consequence of the liability to phlebitis, and the dreadful consequences which result if allowed to remain. Dr. Venon, of Vervier, has recently cured varices of the legs by the application of a solution of the per-chloride of iron. He directs it to be diluted with three parts of water, and strips composed of two or three thicknesses of lint should be placed over the enlarged vessels and secured by a bandage. According to his report the veins are obliterated in about two weeks.

Having read an extract from the *London Lancet* on this subject, and having always cases of this kind under my care, I determined to ascertain whether the treatment was reliable or not. The patient had varices of both legs. I performed Velpeau's operation with the pins on one leg, and used the per-chloride on the other; three ounces of water were added to one of the per-chloride; with this strips of lint three double were wet and applied over the enlarged veins, which were then covered with oiled silk and secured by a bandage. The dressing was renewed every day. In six or seven days the blood was coagulated in the small branches; and in one case the leg was cured in fifteen days, and was in a better condition than the one in which the pins were used. In the other case under treatment the small vessels were obliterated in ten days, and the internal saphena feels much more firm than before the treatment was commenced; and I think in a few days that the vessel will be entirely obliterated.

THE softest road is not always the best road.

TWO SURGICAL CASES.

BY CHARLES B. BRIGHAM, M.D., HARV., SAN FRANCISCO.

IDIOPATHIC FACIAL NEURALGIA—EXCISION OF A PORTION OF THE INFERIOR DENTAL NERVE BY TREPHINING THE LOWER JAW—IMMEDIATE RELIEF.

I.

Daniel C., æt. 46, s. Six years ago a pain like a toothache began in the angle of the lower jaw on the left side; it continued day and night, and at last the patient had five teeth extracted in hopes of relief. He was disappointed, however, the pain was as great as before the operation. He then tried poultices and all kinds of lotions, but still the pain did not pass away. In December, 1873, he went to New York, and soon afterwards an operation was performed in the Brooklyn Hospital, by which the inferior dental nerve was divided from within the mouth. According to the patient's story the wound was healed in a week, and then the trouble went away altogether. He had no pain during the six subsequent months, but after that time it began again as bad as ever. A second operation, similar to the first, was then performed. After this the pain was not wholly abolished, but was much relieved. This relief was but temporary, for in August, 1874, the pain was excruciating. At present it comes on in flashes, followed by regular beats; it is confined to the angle and ascending ramus of the jaw. The ear on the corresponding side has never ached. Every two or three minutes the left cheek becomes rigid and contracted from pain; the patient buries his face in his hands and waits for the spasm to pass by, while the tears roll down his cheeks; or he rubs the cheek violently with the palm of his hand, and thus tries to find relief. The whiskers on the left side of the face are quite rubbed away. There is no pain in swallowing, but the spasm comes on violently after talking a minute or two. The cheek is not painful to the touch,

but pulling a hair from the left side of the head or face causes a spasm. His general health is good, but he has become quite thin, worn out by the pain. On the 11th of September, Drs. Chamberlain, Stout and others assisting, the patient was etherized. For the first ten minutes of the etherization the spasms of the cheek and jaw were well pronounced, coming on once in three minutes. An incision an inch and three quarters in length, slightly concave towards the angle of the mouth, was made on a line extending from just below the coronoid process to the angle of the jaw; the masseter being exposed, its fibres were separated by means of a director, and when the bone was reached its periosteum was scraped away to a slight extent. The edges of the wound were held back by retractors. A thin plate of bone being sawed through, it was pryed from its place by an elevator; it broke in two bits while coming away, and one piece was then removed by a small curved chisel. The dental canal was in the centre of the hole made in the bone; the nerve was soon detected and lifted from its neighboring vessels by a small tenaculum; it was divided by scissors at either end as far as possible, so that exactly half an inch was excised. A damp sponge was then placed in the wound and left there, thus checking a slight oozing of blood. On withdrawing the sponge there was a slight discharge of saliva, showing that the parotid gland had been interfered with. Four sutures were placed in the wound; the lower end was left open. A fresh sponge, wrung out in carbolized glycerine, was then placed over the incision; a compress, Lister's gauze, and a snug bandage around the head and neck, completed the dressing. The patient, having received a quarter of a grain of morphine subcutaneously, went home in a carriage. On examining the plate of bone removed, much softening was perceived; it was full of fat globules, and the cancellated tissue seemed to give way more readily than was natural. The excised portion of nerve was placed in a cup and covered with a small quantity of blood squeezed from a sponge. It was noticed subsequently that

the surface of this blood was covered with minute oil globules. Under the microscope no change in the nerve could be detected. The nerve measured one-sixteenth of an inch in diameter.—Evening P. 84 T. 29½. The patient feels quite comfortable and is sitting up; he says that there is a constant beating in the cheek, and that the lower lip feels numb on one side; he has but little pain in the cheek.

September 12—P. 65, T. 29½. The face is quite dry, and somewhat swollen on the left side. He slept soundly last night for the first time for many months, and is in excellent spirits; the bandage remains unchanged. Evening P. 92 T. 30½. The left side of the face is much swollen; the bandage was removed and the wound was found united throughout. It being somewhat puffy around the line of the incision, a probe was passed through its lower extremity; it gave vent to a small quantity of clear, viscid saliva. A bit of silk was left in the opening made by the probe and a wet compress was laid over the cheek.

September 13th—P. 82, T. 29½. The patient had one spasm of pain to-day, being greatly affected by the sudden death of his uncle, who was present at the operation but two days previously.

September 14th—P. 76, T. 29½. The patient was sound asleep this morning at the visit; the swelling in the cheek had disappeared and the wound was dry and healed; the uneasy feeling in the cheek is diminishing. The bandage was kept on the face until the 24th, by way of precaution; there was then no pain in either jaw or cheek; the line of incision was hardly perceptible; the patient is growing stouter, and is at present—November 25th—hard at work.

PERFORATING ULCER OF THE FOOT—RESECTION OF THE FIRST METATARSAL AND FIRST PHALANGEAL BONES, TOGETHER WITH EXCISION OF THE ULCER—SUCCESSFUL RESULT.

II.

H. L. 45 m. The patient, a strong, large man, has suffered for the last five years with sore feet. From his

own account, the skin of the anterior part of the soles of the feet has for many years, and without known cause, been much thickened. Under the metatarso-phalangeal joints of either foot would appear from time to time, and shifting from one place to another, an inflammation and painful swelling. After a week or two this swelling would open of itself by a minute aperture, and then discharge a thin, yellowish, fetid serum. The opening would then enlarge, and beneath it could be seen the red, bare tissue of the skin; the borders of the opening, at first hard and thick, gradually became detached from the subjacent tissue and elevated, and the discharge collecting under them, would make a most offensive odor. The sore would then extend its circumference and grow deeper, having for its base a greyish tissue, scarcely deserving the name of granulations. Locomotion being at last impracticable, the patient would lay up for a month or two; the severer symptoms would be ameliorated, the ulcer would nearly heal, or would shift its position, always leaving a tender spot at the base of the toes. As the patient's business required him to stand on his feet most of the time, their condition made his life far from agreeable. He had tried all sorts of dressings, and found most relief from flax-seed poultices. Each physician who attended him ordered him a different pair of boots, so that at last he counted them by the bushel. It was finally proposed to operate on the foot in hopes of permanent relief; there were at the time two ulcers, one at the base of each great toe. The one on the right foot was by far the more serious, being three-quarters of an inch in diameter at its base, while the surrounding skin was destroyed and undermined to the extent of an inch and a half; the depth of the ulcer was nearly half an inch, owing somewhat to the thickened cutis. The great toe was much hypertrophied, and turned under the second and third toes. No dead bone could be felt with a probe, but the finger detected a hardened base, which proved afterward to be due to the enlarged sesamoid bones, which were closely adherent to the granulations, and much

softened and necrosed. It was decided to remove the metatarso-phalangeal joint and excising the ulcer to allow the part to heal by granulations. Accordingly, on the 7th of September, Drs. Wythe, Martinache and others assisting, the patient was etherized, and a straight incision three inches in length was made along the inner side of the great toe and metatarsal bone. The joint was then opened, and as much of the periosteum as possible was scraped away from the end of the metatarsal bone and first phalange; the former bone was then disarticulated at its distal end, and with a chain saw was divided in its upper third. It was then noticed that the cancellated tissue was soft and discolored, and it was thought best to remove still half an inch of the bone. Even then the bone tissue did not have a healthy appearance, but it was thought safer to let it remain as it was rather than open the tarso-metatarsal articulation. The first phalanx of the great toe was dissected away, together with two large sesamoid bones, each three-quarters of an inch in length. Eight ligatures were placed upon small arteries; the ulcer itself and some of the surrounding tissue were cut away. To the eye this tissue looked like pork fat. Clean sponges were left in either wound, and afterwards Lister's dressing was applied. Evening P. 88, T. 30. The next day there was no swelling in the foot; and no pain. On the 9th the sponges were removed without hemorrhage. P. 82, T. 30. On the 10th the patient sat up on a lounge. The dressing was not changed until the 15th; charpie was then inserted between the flaps, so that the wound by healing from the bottom would give greater thickness to the foot. On the 20th the granulations were on a level with the surrounding skin; the wound was then strapped with adhesive plaster; the antiseptic dressing was still continued. On the 7th of October the wound was wholly healed; there was no trace of the ulcer; the big toe was in good position at the side of its fellows, but somewhat shortened; the patient suffered no pain whatever, and had no fever from the first. While he was recovering from the operation the ulcer on

the left foot had been treated with carbolized glycerine, and had become wholly healed. At the patient's request a pair of shoes were ordered which measured one inch longer than the foot, and which had low, wide heels and broad soles. By this kind of heels the pressure was somewhat taken away from the metatarso-phalangeal articulation. It was explained to the patient that the ulcer on the left foot would probably return after walking upon it. The right foot seemed in excellent condition, and the resection did not make any inconvenience in walking.

First described in France by Cloquet, in 1837, the perforating ulcer of the foot is now recognized as a formidable malady; constitutional, and in certain cases hereditary, it originates as a flattened corn with thickened elevated edges. A fistulous opening soon forms at its centre, and gives rise to a very offensive discharge. A probe passed into the fistula detects a separation of the epidermis from its subjacent tissue to some distance on either side. After the fistula has remained open for a little while the dermis begins to ulcerate, and then the bones beneath the grey, unhealthy granulations of the base may be found uncovered. It remains in this condition for months, until the patient takes to bed, when it heals up, to appear in the same or a neighboring spot, as the patient begins walking. As the disease rarely if ever attacks the heel, it was Nélaton's idea to make the patient walk on that part of the foot so as to take away the pressure from the toes. Mr. Hancock, in his excellent work on the "Operative Surgery of the Foot and Ankle," page 74, says: "Once perforating ulcer of the sole of the foot is established and recognized, it is better at once to remove the whole of the metatarsal bones either by Chopart's, Syme's, or Pirogoff's amputations, than by palliative operations and remedies, condemn our patient to a succession of painful disappointments." With our patient it was thought advisable to try the effect of removing the metatarso-phalangeal joint before resorting to a more serious operation, especially as the removal of necrosed bone from the great toe of the left foot some years ago had been followed by great amelioration in the ulcer.

PROFESSOR C. M. BATES' CLINIC AT THE CITY AND COUNTY HOSPITAL.

Two Cases of Abscess of the Liver.

REPORTED BY C. T. MILLER, M.D., SAN FRANCISCO.

CASE No. 1. L. L., native of France, æt. 36. Admitted in the City and County Hospital March 27th, 1874, patient complaining of severe pain in the right side, about the region of the liver, headache, constipation of the bowels, loss of appetite and sleep, and fever of a remittent type. On examination of the patient the liver was found to be very much enlarged; great pain on percussion; skin dark; tongue coated; system otherwise well nourished.

Diagnosis—Circumscribed inflammation of the liver.

Ordered emplast. canth. 4 x6, and ℞ mass hydrag. ʒi, podophylin gr. iij, misco ft. pil. No. xij; signa three pills every other night; ℞ pil. quiniæ sulph. ad grs. ij. No. xij; signa two pills three times a day.

April 3d—Pain very acute, with loss of sleep; bowels constipated. Ordered ℞ pil. cathar. comp. No. xij; sig. three pills every second or third night; ℞ chloral hydrat. ʒij, potassii bromidii ʒi, syr. aurantii ʒi, aqua font ʒiij misco, sig. one tablespoonful at night.

April 15th—Acute symptoms still present. Ordered emplast. canthar. 6 x 8.

April 25th—Appetite is very poor; fever still of quotidian type. Ordered ℞ quiniæ sulph. ʒj; acid sulph. aro. ʒij; spts. eth. nit.; tinct. myrrha a@ ʒj; tinct. gentian comp.; tinct. cincho co.; syr. simplex a@ ʒij. Misco. sig. one tablespoonful three times a day.

May 9th—Patient failing in strength. Ordered spts. frumenti ʒvj daily.

May 25th—Patient unable to lie upon his back is owing to the pressure of the liver against the lung; breathing is very laborious. Ordered claret oj daily.

May 27th—Symptoms of pneumonia well marked in lower lobe of right lung; pulse 110; temperature 103;

continued quinine. Ordered ℞ tinct. verat vorid ʒi, sig. five drops every three hours till pulse is lowered; milk punch and beef tea to be freely given; one egg morning and night; a tablespoonful of brandy every two hours.

May 29th—Pulse 80; temperature 100.

June 2d—Acute symptoms of pneumonia controlled; discontinued tinct. verat virid.

June 4th—Patient improving very fast; continuing beef tea, eggs and brandy.

June 6th—Pain in the liver very much aggravated. Ordered ℞ ferri et quiniæ cit. ʒij; tinct. cincho co.; aqua memth pip. a@ ʒiij. M. Sig. one tablespoonful three times a day.

June 12th—Patient feels very much exhausted; abscess broke its way through diaphragm into the lung; a constant cough is kept up, and the pus ejected from the lung in large quantity—nearly one quart in twelve hours.

June 15th—The abscess still continues to discharge; the pain is less acute, but the cough is very distressing to the patient.

June 17th—The discharge of the abscess is less in quantity and the patient is very much relieved.

June 25th—The discharge of the abscess has ceased; the whole quantity of pus was nearly three pints.

July 1st—Patient is able to leave his bed and walk around; the liver, which formerly reached within a half-inch of the crest of the ilium, has receded nearly to its normal size.

August 1st—Patient has a distressing cough, with an occasional discharge of matter; lower part of lung consolidated.

September 3d—Patient discharged with slight cough, but feels well otherwise.

CASE No. 2. J. L., native of Ireland, æt. 38. Admitted in the City and County Hospital August 23d, 1874. On admission the patient complained of a severe pain in the right side below the ribs. On examining, found the liver very much enlarged, representing a large tumor; the

spleen also very much enlarged; skin hot and dry; severe pain in the frontal region of the head; tongue coated; pulse 110; bowels constipated. Ordered ℞ pil cathar. co. xij; sig. three every other night. ℞ pil quin. sulph. a@ gr. ij, No. xij. Sig. two pills three times a day; ℞ Wngt. iodine co. ʒij; sig., use three times a day over the region of the liver and spleen.

August 24th—Condition of the patient unimproved. Ordered emplast. canthar. 8 x 10; to be applied over the liver.

August 26th—Patient is complaining of intermittent fever of the quotidian type; increased the dose of quinine.

August 30th—The patient had a chill every day; quinine in large doses seems to have but little effect. Ordered sulph. bebrus ʒi, ft. pil. No. xx; sig., two pills three times a day.

September 4th—The patient had no chill for the past two days; complains of excruciating pain over the seat of the liver.

September 6th—Patient has a high fever; temperature 102; pulse 110; the pain is very great. Ordered stimulants and beef tea to be freely given.

September 10th—The abscess of the liver broke this morning into the deodenum, with such a force that some of the pus passed into the stomach, which he vomited up, and from the bowels he passed two night-vessels full of fæcal and pus discharges.

September 11th—The patient is easy but much exhausted; had another discharge from the bowels, mostly pus; temperature normal; pulse 85.

September 14th—The patient is up out of bed for a few hours; the discharges from the bowels are streaked with pus; no pain on pressure over any part of the abdomen.

September 18th—Patient feels well and quite strong; the discharge from the abscess has ceased; the outline of the liver can be felt two inches below the ribs; formerly it extended nearly to the crest of the ilium.

September 19th—Patient discharged cured.

In neither of these cases was there any fluctuation discovered to warrant surgical intervention.

ATAXIA.

Locomotor Ataxia and Schlerosis of the Posterior Columns of the Spinal Cord in Childhood—Opthalmoscopic Signs.

BY M. BOUCHUT,

(*Gazette des Hopitaux*, No. 38, 1874.)
Translated from the French, by JAMES G. STEELE, of San Francisco.

Locomotor Ataxia is seldom observed among children. In an excellent monograph of our confrere, Topinard, of one hundred and four observations which he has collected, not one case under twenty-six years of age appears. Friederich mentions but three cases in young subjects between the ages of fifteen and eighteen years. To-day two cases of ataxia have presented themselves to my observation; one, that of a child of eleven, and the other a subject of fourteen years. An excellent occasion is here offered to study this disease in infancy and to note its resemblances and differences from that of adult age.

I will also at the same time direct attention to the importance of the opthalmoscopic signs first made known by me in the year 1866, and by which we can diagnose the primary stage of this malady.

The first of these invalids is a boy aged eleven years, sick for fifteen days, and who without any previous sickness was seized with a marked feebleness of the superior and inferior members. He walks irregularly, and equally so whether with open or closed eyes. He has dull pains in the knees, and tinglings in the feet, which disappear and return alternately from time to time. He is troubled with frontal headaches, visual feebleness and obscurations of sight, and sometimes diplopia, with occasional convergent strabismus.

He has no difficulty of hearing, nor of general sensibility. Reflex sensibility is perfect. The child has but little appetite, no sickness of stomach, but complains of a slight constipation. His pulse is regular.

Upon application of the opthalmoscope, the two papillæ are discovered of a pale rose tint, diffused, of a flattened appearance, and in an evidently congested state. The arteries are small, and the veins slightly dilated. These symptoms represent the first stage of hyperemia produced by spinal affections.

The second case is that of a girl of fourteen years—small, and of a short stature; formerly rachetic, not having had established the catamenial flow, and showing but slight external signs of puberty. She has been affected for two years. On returning from a walk she felt herself feeble and walked with difficulty. Since that time she has never recovered. She has never had rheumatism, and there has never appeared in her past history any circumstance indicative of syphilis, alcoholism, or lead-poisoning. The cause of her malady is entirely unknown. However this may be, this child has had, and still has, headaches from time to time. She has had sometimes momentary embarrassment of speech, diplopia, and a notable visual enfeeblement.

She suffers in her back and loins. In the back it is a spinal pain, provoked by pressure on the process of the tenth dorsal vertebra and of the second lumbar. In the loins, on the contrary, it is a permanent pain with lateral constriction of the thorax; and this pain incommodes the child from straightening herself after having knelt or bended forward.

She has formications and congestions in the inferior members, which are traversed by pains deep-seated, articular, or appearing in the continuations of the members. The pains are not accompanied with heat or flushings; they are lancinating, sometimes quite acute, and accompanied with twitchings which cause the members to jerk.

The child walks slowly with difficulty, without vacillation and without evident trouble of muscular co-ordination;

for, though the steps are small and uncertain, they are, nevertheless, regular, and whether the eyes are open or closed the movements are always the same.

In bed, the eyes being closed, the child moves its legs at the request of the observer. She moves them to right or left when directed, but more feebly than when the eyes are open, and with a light tremor. She can raise the hands so as to touch the face, and in fact in all directions. I did not observe with them the least tremor. The eyes being closed, she can always sustain a weight in the hands or maintain it with the fingers. Therefore the muscular sense is intact, and she has at the utmost only a slight feebleness in the movements of the limbs.

The sense of touch is equally intact, and there are only the reflex movements which are repressed, inasmuch as one can titillate in any manner the soles of the feet without any evidence of uneasiness or shrinking. The electric contractility is preserved.

The child has a good appetite, is never sick at the stomach, goes to stool regularly and has no trouble with the urine. She does not cough nor present any abnormal pulmonary signs.

The auscultation of the heart indicates at the first time at the base within the nipple, quite a strong bellows-sound, followed by a normal valvular beat, which proves a slight diminution of the aortic orifice.

In the eyes, the opthalmoscope reveals an excessive hyperemia of the optic nerve, of which the papilla is obscure, and whose borders, especially on the right side, present a slight grayish infiltration of the retina. This alteration is more marked in the right than in the left eye.

By these symptoms it is easy to recognize a malady of the spinal cord, a disease chronic for two years, and which has obtained possession of the sensitive cords in preference to the motor cords. In fact there is no paralysis of motion, but only that of sensibility. It is, without doubt, a malady of the spinal cord, for it has produced, from the first, embarrassment of speech, slight diplopia and a notable

visual debility, which is explained by the action of the great sympathetic nerve, whose roots are lost in the spinal cord at the commencement of the dorsal region.

All these maladies of the spinal cord, as well as those that I have made known to the profession in my "Recherches de Cérébroscopie," give always as a first symptom, hyperemia of the papilla, alteration of the nerve, and in most cases, atrophy and amaurosis.

In what does this disease of the spinal cord consist? Where is its locality?

It is a chronic myellitis of the spinal cord, not a softening, which, destroying all the nervous elements, induces motive and sensitive paralysis, but a *partial induration* disseminated, which by its nature leaves intact a part of the nerve-tubes.

This induration is now called "Schlerosis." Formerly, one would express the lesion by a word of Latin etymology. Now, following the order of change, we qualify by a word of Greek origin. If this is satisfactory to pathologists and this change of language renders them happy, I present them my congratulations.

We have then to do at present with an induration or schlerosis of the spinal cord.

In accordance with the examination of the patient not paralyzed, this induration does not occupy the anterior columns, and in keeping with the sensitive disturbance as shown in her case, only the posterior columns are affected. Is this schlerotic induration in continuous bands or in scattered patches?

By reason of the slight gravity of the symptoms we can believe that the schlerosis is not greatly extended, and is not yet at that period when considerable parts of the medullary spinal tissue are separated from the diseased portions.

It is evidently a schlerosis, disseminated — occupying the posterior filaments of the cord and extending very high, as is demonstrated by the disturbance of both speech and vision.

The cause of the malady is unknown. No diathesis, no poisoning can account for its origin. By reason of the cardiac murmur of the aorta, we might attribute it to a *latent* rheumatic influence, but that is all. In short, the child has never had acute articular rheumatism, and if she has spinal rheumatism it exists as a primitive malady.

Without devoting more attention to the nature of this schlerosis of the posterior filaments of the spinal cord—a question insoluble—I would state that I have not shown, or more properly made known, the nature of the lesions existing in the child, of which I have spoken. Of these lesions a good idea can be formed from the anterior facts. They are all the same, save in extent; they are recognizable with the eye as well as with the microscope.

To the unaided eye, the spinal cord being deprived of its *Pia Mater*, shows on the white medullary substance various yellowish spots, firm to the touch and more or less large and contiguous. Moistened with a solution of chromic acid, or a solution of carmine, and afterwards cleansed with distilled water, the spots assume a white color in the first instance, and a rose tint in the second. These lesions present themselves at different heights from the bulb to the cerebral peduncles of the cord, and even as far as the walls of the ventricles. The nerve roots, and in the cranium, the optic nerves on the third pair, are sometimes yellowish and gelatinous.

Under the microscope it is seen that the nerve elements, both cells and tubes, have in part disappeared. The tubes are emptied of their pulp; at times granulated and shrunken to the size of their axis-cylinder. They are choked with a superabundance of neuroglia and of fibres of connective tissue, rarely by amygloidal corpuscules, and finally by fatty granulations, according to the age of the malady.

When the lesion is examined in transverse sections colored with carmine, its depth and the degree to which it has extended can be distinctly discerned.

To sum up, and to show that this affection is *solely* spinal schlerosis: There is, in the points affected, a destruction

of the nerve-elements of the spinal cord by pressure of the newly-formed connective tissue. If there is abundant proliferation of the connective tissue and disappearance of a large number of nerve-tubes, ataxia is well defined; on the contrary, if the schlerosis is discrete, strongly disseminated, there exist only sensitive troubles and slight incoordination of movement.

With the child last mentioned, the schlerosis appeared to have been of an exceedingly slow evolution, judging from the slight progress it has made during the two years since the epoch of its invasion.

This malady will last for many years; for the cases of this nature may be prolonged fifteen or twenty years, with a progressive aggravation which terminates in death.

Can the disease be cured? Yes. Examples of perfect cure are known, but they are difficult to obtain.

To attain a cure, we must have recourse to vapor-douches, natural or artificial sulphur-baths, revulsives over the spine, such as cauteries, moxas, vesicants, exciting aromatic frictions or applications, electrications and preparations of arsenic, iodine, iron, and nitrate of silver.

I do not attach great importance to the use of electricity, as it excites in lieu of allaying the pains, and which is of benefit only in cases of spinal motor paralysis. I prefer sulphur-baths as a local means of treatment, the internal administration of nitrate of silver, which, though failing often, sometimes ameliorates and effects a cure. I give the crystalized nitrate of silver in pills, from the following formula:

℞. Argent. Nitrat. cryst., 50 centigrammes;
Mica Panis, q. s.
M. Div. in pil. no. L.

The child should take at first one pill, fasting; afterwards two, and finally three pills a day for eight days; at the termination of which time a black line will be discerned upon the margin of the gums.

This medicine should then be discontinued, because if persisted in there would be produced that blackish,

slate-colored tint of the skin which is produced by the reduction of the nitrate of silver, which in the blood permeates the skin, undergoes the action of the solar light, and forms the black oxide of silver. This result should be avoided, unless an amelioration warranting the hope of a cure authorizes its continuance.

Surgery.

Quinine and Suppuration.

BY DOUGLAS MORTON, A.M., M.D.,
Physician to the Louisville Hospital, U.S.

Some months since—before I had given any special attention to the property lately discovered in quinine, of exercising control over the suppurative process—a friend gave me a formula containing this agent, which he told me he had used with great success in treating gonorrhœa.

The quinine was prescribed in the strength of two-and-a-half grains to the ounce of distilled water, to be injected three or four times a day. This treatment in my hands has been followed by such uniformly good results that I have rejected all others in its favor; and the number of cases in which I have used it has been sufficient to afford a fair test of its value.

Though the formula contained other ingredients—zinc sulphate, tincture of gelseminum, and enough sulphuric acid to dissolve the quinine—I now think its efficiency is chiefly due to the quinine, and this through the peculiar influence which the drug is now known to exert over suppuration, in checking the amœboid motion of the white blood-cells and constringing the coats of the capillaries. I lately commenced a series of experiments, putting this theory to the test.

At this time I had under treatment a patient with empyema of nearly four months' standing, whose chest I had tapped a few days before, pumping away about three pints of very fetid pus. The treatment up to this time had been a daily washing out of the cavity with a weak solution of carbolic acid; and as yet the pus continued to be discharged in considerable quantity and to be very offensive.

This case I thought would afford an excellent opportunity for testing the property of quinine referred to above, as well as another—that of staying the decomposition of animal matter, by very effectually destroying the vitality of certain organisms upon which this decomposition seems to depend. Accordingly, every day, after cleansing the cavity with the carbolic acid lotion, about six grains of quinine in two or three ounces of water were thrown in, and allowed to remain. Since the commencement of this treatment the discharge of pus has rapidly diminished, and no unpleasant odor has been noticeable. The patient in the meantime has made good progress towards recovery, and her improvement in every particular seemed to begin sharply at the time she was put on the quinine treatment.

This patient is a young mulatto woman, and when admitted to the hospital was so extremely emaciated, so low in every way, that in operating I feared I should uselessly inflict pain, and must confess that I was finally moved to operate rather by the desire of Dr. Chandler, the resident physician, to see his diagnosis of empyema positively verified, than by any hope I had of giving permanent relief.

With the view of getting better drainage, I made another opening after a few days, near the most dependent part of the pleural cavity, and inserted a tube. This tube, however, slipped out, and the opening closed, leaving the first, in which a tube about a fifth of an inch in calibre had been inserted, to do the whole work.

I mention this because the patient has good prospect of recovery under a condition which has been supposed unfavorable—that of having only one small opening into the cavity; either two openings, or one made very large, by removal of a section of rib, having been deemed almost necessary to a good result.

My second experiment was made upon a large ulcer of two years' standing, situated on the leg of a woman about forty years of age, who had for some time been suffering with mitral lesion, which had already begun to cause œdema of the feet and ankles. The woman, moreover, was ill nourished, and had a very unhealthy look. I give these particulars to show the unpromising character of the case.

The quinine was applied incorporated in benzoated zinc oxide ointment; ten grains to the ounce. The ulcer at the time this treatment was commenced secreted pus very copiously. After two or three days the suppuration had greatly diminished, and the whole surface of the sore was

covered with healthy granulations. The healing process, considering the very unfavorable conditions, advanced rapidly up to the last time I saw the patient, a few days ago.

My third experiment was made in a case of mammary abscess which occurred in a primipara a few days after her delivery. The breast was opened in due time, and some six ounces of pus evacuated. Small purulent deposits, however, unconnected with each other, continued to form in spite of both general and local treatment. This condition of things seemed disposed to become chronic, and I determined to try the topical quinine treatment. The quinine, in the strength of ten grains to the ounce of water, was daily injected into the sinuses left after evacuating the small abscesses mentioned.

After being under this treatment three or four days, the deposits of pus ceased to form, and the patient rapidly got well.

As regards the gonorrhœa cases treated with quinine, I am strongly inclined to attribute the good results to the use of this agent. The average length of time required to completely arrest the discharge has been shorter under this treatment than any I have ever tried; and in no instance has a patient come back to me, after leaving off the treatment a day or two, with a return of the discharge, as so often is the case after treatment by astringents used alone. In no case has there occurred the complication of swelled testicle, a condition supposed by some, and no doubt correctly, to be due to the use of strong astringent injections; nor has any case terminated in gleet.

It may be well to add, further, that I adopted this treatment in the first instance simply upon the recommendation of a very intelligent practitioner, and that I did not have a theory of its action until long after I had recognized its efficiency.

I can easily believe that one opposed to this theory of the action of quinine might not concur with me in the estimate I place upon the data derived from the other experiments, but I do not think that any one free from bias could see what passed under my observation without being very favorably impressed with the merits of the treatment tested, and disposed to make further trial of it, with almost expectation of success—which, by the bye, is just the mental attitude I hold, after my limited experimentation.

I call attention particularly to the immediate effect following the quinine treatment upon the ulcer, of diminishing

the secretion of pus, and inaugurating at once an active healing process, in which was afforded a clear illustration of the power of this agent to check the waste of force and material involved in profuse suppuration, and to direct them to the work of building healthy tissue.

Of my experiment upon the mammary abscess, I wish to say that, standing alone, I regard the data gathered from it as of very little value, and only give it place as supplementary to the others.—*The Practitioner.*

On the Use of the Constant Current in Spermatorrhœa.

BY JULIUS DRESCHFELD, M.D., L.R.C.P.,
Assistant Physician Royal Infirmary, Manchester.

The application of electricity in cases of confirmed spermatorrhœa, though recommended many years ago, seems not to have found that attention amongst the profession which it justly deserves. Nearly all our text-books, while giving a long list of remedial agents, do not mention electricity at all; and even treatises on electro-therapeutics, with few exceptions, dismiss the subject with but few words. The subjoined cases, however, will show that we possess in electricity, after all other remedies have failed, a most powerful and efficacious means in arresting and curing that obstinate disease, which renders the patient a curse to himself and an object of misery to others.

The first case that came under my notice was that of a young man, aged 23, whom I saw for the first time in October, 1873. He had then been an out-patient of the infirmary for five years, having been repeatedly transferred from the medical to the surgical department and back again. He had been treated amongst other things with strychnia, cantharides, bromide of potassium, and blisters; he had had the *porte caustique* applied several times, and had even a part of his prepuce removed, yet his condition grew worse and worse, and he was rendered perfectly impotent.

As regards his previous history I took the following notes:

Albert B., 23 years of age, remembers to have suffered from scarlet fever complicated with dropsy when seven years old; when fifteen years old he first noticed trembling in

his legs, fatigue after slight exertions, and uneasy sensations in both inguinal regions. At seventeen he began to suffer from frequent nocturnal pollutions; a year later he came to the infirmary, but the disease progressed; the noctural emissions were joined by involuntary emissions by day; semen began to be discharged on micturition and defecation, or by lascivious thoughts, the erections became weaker, and ceased altogether two years ago. The trembling in the lower extremities, which he had first noticed, increased and was followed by loss of memory, despondency, and great psychical depression.

He further stated that he began to masturbate when fourteen years old, and continued that practice till he was seventeen, but has never recurred to it since.

The patient looked thin and emaciated, had a sallow complexion and stinted stature. The physical examination revealed nothing abnormal; the testicles seemed well developed; pressure on the spermatic cord was, however, painful; the urethra discharged a colorless, glary fluid, which on microscopic examination showed a large quantity of epithelial scales, granule cells, and spermatozoa, which latter, however, consisted chiefly of the well-defined head, without the tail. The lumbar region of the spine was painful on strong percussion. The legs were trembling, but not the arms; but there was no paralysis, and the electromuscular irritability and contractility seemed normal.

The patient was treated medicinally from October, 1873, to March, 1874, without any benefit whatever. On the 14th of March, electricity was applied for the first time in the form of the constant current; 29 elements of Weiss's battery were used, the positive pole applied on the lumbar part over the spine, the negative pole in different points along the perineum, scrotum, and inguinal region. The patient presented himself again on March 19th, and reported great improvement. He stated that on leaving the infirmary after having been galvanized, the first effect he noticed was, that the sight of young females, which had always caused a peculiar dragging in the penis, had no such effect, and for four days he had no emissions, except on going to stool, but he had as yet had no erections. He was again galvanized that day (19th of March,) and returned on the 21st, stating that he had that morning had an emission, preceded by an erection. Galvanization was then continued in the same way, and in the course of a month great improvement had taken place: the emissions without erections had ceased altogether, the erections themselves

became stronger and appeared chiefly in the morning on awaking; there was still, however, a discharge with defecation. The treatment was continued, the improvement kept pace with it, and about the end of June, he considered himself completely cured; the only semen he now lost was at nocturnal pollutions, which did not happen oftener than once or twice in a fortnight. The improvement in the other accompanying symptoms was no less marked; his memory improved, and the despondency left him; the legs, however, yet trembled a little, especially on excitement.

I saw the patient a fortnight ago, when he assured me that he considered himself quite well, and had taken up again his occupation, that of a bookbinder, which he had left off for nearly three years.

Unfortunately, I have not been able to examine the semen since the application of the galvanic current was first tried.

The second case was that of Francis M., aged 22, who came to the out-patient room for the first time on February 19th, 1874, suffering from "faints and debility." His history is briefly told. When a child he suffered from convulsions, which ceased with the expulsion of a tapeworm. He began to masturbate when thirteen years old, and remained addicted to onanism for five years. The first symptoms of seminal weakness showed themselves at sixteen, in the form of frequent nocturnal pollutions and imperfect erections. His infirmity increased, and he suffers now, and has done for years, from involuntary emissions by day and night; he has, however, still incomplete erections. The accompanying nervous troubles were excessive weakness, vertigo, loss of memory, great depression of spirits, and for the last twelve months (and for which he chiefly sought advice) repeated "faints." He had not been able to follow his work, especially on that account, for the last twelve months. The genital organs presented nothing peculiar; the sperma I was unable to examine. The general appearance of the patient resembles very much that of Albert B. I tried tonics and cold water enemta, but without success, and the patient soon left off treatment. Seeing the excellent effects of galvanization on the first patient, I looked up F. M., and persuaded him to subject himself again to treatment. I modified the application of the constant current in this case by merely making use of descending labile currents of 29 of Weiss's elements. The first sitting took place on the 25th of April, and was already followed by a marked improvement in the form of more

powerful erections. The treatment was continued in the manner indicated twice a week, for a month, with the most gratifying results, the only abnormal symptom remaining being a nocturnal pollution happening about twice or three times a week. The general health of the patient was, however, as yet far from satisfactory, and he availed himself then of an opportunity which afforded itself to go on a long sea-voyage. I have heard nothing from him since.

The third case is that of a young man, W. O., 22 years old, who had been under treatment for writer's cramp, for which the constant current had been steadily applied for six weeks (the treatment began in the middle June), without any marked result. The patient, however, wished to have the treatment continued, as it had cured him of a disease "which he was too ashamed to confess when applying for advice." He stated that for two years he had suffered from involuntary emissions by day; he had never lost the erectile powers, but the least erotic excitement had brought on an emission of semen: for this complaint he had been to a hydropathic establishment, and he had consulted some of the most eminent syphilitologists on the continent without any permanent benefit. The cause he assigned to onanism. He describes the effects of the constant current, which had been applied along the whole length of the spine, as very astonishing, and assured me that after a fortnight's treatment the daily emissions had stopped and the erections became of longer duration. The patient has remained under my observation ever since, and while the writer's cramp remains as intractable as ever, he has completely regained his sexual powers, in proof of which I may cite that about a month ago I treated him for a very smart attack of gonorrhœa.

The above are the only cases of spermatorrhœa which have come under my observation, and the results, I think, very fairly warrant the assertion made at the opening of this communication, "that we have in the constant current the most efficacious remedy for even very inveterate cases of spermatorrhœa."

As regards the *rationale* of the treatment, I wish to draw attention to Cases 2 and 3, where the spinal cord was only galvanized, with as much benefit as if the genital organs had been directly galvanized, as was done by Althaus, who galvanized the urethra; and Onimus, and Legros, who cite three cases where a descending current was passed from the spine to the perineum. That this should be so is not astonishing, for whether the evil effects of long-continued

spermatorrhœa be due to the repeated losses of so highly albuminous a product as the seminal fluid, or to the strain on the nervous system by the constant excitement of frequent masturbation, there can be no doubt that the final effects proceed from derangements in the nervous sphere —derangements for which the stimulating effects of the constant current are particularly applicable. Furthermore, recent researches of Goltz (*Pfluger's Arch.* 1863, p. 582) tend to show that there exists a separate nerve-centre for the nervi erigentes in the lumbar portion of the spinal cord.

In conclusion, I will only remark that in the cases related above it seemed immaterial whether the ascending or descending current was used.—*The Practitioner.*

Sub-Periosteal Amputation.

Professor Houze de l'Aulnoit, of Lille, has a late suggestion on this operation. His system of operating in cases of amputation consists in substituting for the old method an entirely new one, to which he has given the name "la Périostéomie," which means as follows: After the first incisions and flaps, say of a thigh, have been made by the operator, and properly retracted by the hands of an assistant, instead of the usual direction given in all surgical works and lectures, "with another sweep of the knife divide the periosteum," he advocates the dissection upward, by means of a bistoury, of the periosteum, and the formation of flaps of the same, so that when the limb has been removed these flaps can be made to form the immediate covering of the bone. Dr. Aulnoit advocates especially his system of "Periosteomie" because the periosteum having, in health, been in intimate connection with bone, becomes not only a bone protector, but also a bone-growth promoter, after such an important operation as the amputation of a limb.

Dr. Aulnoit gives interesting details of many cases from the battle-fields of the late war, as well as many others, in support of his new theory, which he is sanguine may be adopted everywhere.—*Medical and Surgical Reporter.*

CARNAL comforts leave us in love with sin.

Institutes and Practice of Medicine.

On the Pathology of the Sympathetic Nerve.

BY DR. ALEXIS LUBIMOFF, OF MOSCOW.

The "original translations" published in the *Detroit Review of Medicine* are replete with interest. We offer one of them as an illustration:

Hitherto but little attention has been given to the pathology of the sympathetic nerve. As the author was much interested in the study of the diseased state of this nerve, he examined its condition in about two hundred and fifty corpses. He found that he had to surmount unusual difficulties in pursuing his studies, and he thinks that this might be the probable reason why others, who would have to struggle with the same difficulties, show much indifference respecting all investigations concerning the sympathetic.

The main parts which were examined by the doctor are the superior cervical ganglion, a few ganglia from the dorsal or lumbar portion of the nerve and the coeliac ganglion. It was observed by him that often only one side of the nerve was in a pathological condition, or that the pathological process was more advanced in the one than in the other side of the nerve. He directed his attention especially to the condition of the nervous elements, the connective tissue, and the circulatory system of the sympathetic.

A. Pathological changes in the circulatory system of the sympathetic. There is a great difference in the distribution of blood to the vessels of the sympathetic. Parts of it may appear anæmic or injected, even ectasia or extravasations may be observed. If the vessels are empty, the ganglion appears white when cut; in case of injection the color of its surface, and on the cut, is red. The superior cervical ganglion is often injected, and in cases of strong injection there may be noticed ectasiæ in the course of puerperal fever, and in typhoid fever. When the patients had been delirious during life, there could be found also extravasations in the same ganglion. Here arises the question, if such extravasations are in life connected, in some way, with the delirium. This is the more probable, as some authors have found, that *there is a connection between the superior*

cervical ganglion and the vessels of the brain, as in cases of extirpation of this ganglion the brain vessels become dilated.

A fatty degeneration of blood vessels was found, to the greatest extent, in a case of poisoning by phosphorus. The walls of the vessels were dotted all over with little bright dots, in all ganglia, but especially in the coeliac ganglion.

An increased number of nuclei, in the walls of the vessels, were detected in cases of chronic hectic and some acute processes. A few times they seemed to be the product of proliferation of the nuclei.

In a case of Asiatic cholera the walls of the vessels, especially in the coeliac ganglion, were thickened.

An amyloid degeneration of the walls of the vessels seldom occurs in phthisis of the lungs, even if other organs, the spleen, the kidneys, are affected in such a manner. But it occurs oftener in cases of chronic suppuration of the joints or other organs, and sometimes in syphilis. In most of these cases the coeliac ganglion is affected, sometimes the whole sympathetic.

A metastasis in the blood vessels was noticed, under interesting circumstances. In a case of pyæmia, in another one of diptheritis, and in a case of ulcerous endocarditis it was discovered that in the superior cervical ganglion, and in the coeliac ganglion, a number of vessels were filled with a grayish granular substance. By close examination it was found that this was an aggregation of micrococci, which also appeared in the parenchyma of the ganglia.

B. Pathological changes in the connective tissue of the sympathetic. These may concern the epineurium, which is the common capsule of the whole ganglion, or the perineurium, the capsula for some groups of nerve cells, or the endoneurium, the septa between the perineurium. The capsules have the appearance of broad stripes. They were found in the supreme cervical ganglion, in a case of delirium, and in the coeliac ganglion in a case of liver cirrhosis. In children, sometimes, such a change of the coeliac ganglion is produced by pressure caused by enlarged lymphatic glands.

A proliferation of the nuclei of the connective tissue was observed in the endoneurium as well as in the capsule around each single nerve. They were sometimes much developed in the cervical, dorsal and lumbar ganglia.

In a case of diffuse nephritis there was found a *fatty degeneration* of the elements of the connective tissue, consisting in an accumulation of fat drops around the nuclei of the connective tissue.

C. Pathological changes in the nerve elements of the sympathetic. The author found that in adults the nerve cells of the sympathetic always contained pigment, which increased in amount with age. It often occupies so much of the nerve cells that their nuclei cannot be distinguished. In general, the degree to which the pigment is deposited depends upon the age of the person. It is not only found in the nerve cells and their appendages, but also in the connective tissue cells, often in great quantities. The doctor found pigment deposited in such a manner in the coeliac ganglion in a case of liver cirrhosis, and in the supreme cervical ganglion in a case of phthisis, and in progressive paralysis of the insane. In chronic hectic processes, in which at the same time many of the inner organs are affected, the nerve cells of all the ganglia appeared more pigmented, but in cases of typhoid fever the pigmentation of the cells was normal. If the pigmentation of the nerve and connective tissue cells is considerable, the ganglia appear dark gray on a cross cut as well as externally. In cases of carcinomatous affections of the intestines, a *fatty degeneration* in the nerve cells of the coeliac ganglion was rarely seen. Not oftener a *sclerosis of nerve cells* was observed. In diabetes mellitus this affection was noticed, especially in the coeliac ganglion.

The protoplasm assumed other qualities, and its outlines appeared distinctly marked. In the cells no nuclei could be observed, but many appeared pigmented. In Remak's fibres an increased number of nuclei was found, and in cases of fibrinous pneumonia with delirium, they were observed in a state of fatty degeneration.

The Eucalyptus Globulus.

Dr. Hirsch, on the strength of nine cases in which he has tried this remedy, gives his opinion that its power is little, if at all, inferior to that of cinchona. In all of the cases the diminution of the spleen in size was evident. In most of the cases three or four teaspoonfuls of the tincture succeeded in arresting the next impending paroxysm.

A captain of the French army, according to *Science pour Tous*, not being able to abandon the use of tobacco for smoking, although its use caused him serious inconvenience,

has for several years mixed a few dried leaves of the *eucalyptus globulus* with the portion of the *weed* which he is in the habit of using daily. Since he has employed this mixture he asserts that he has experienced neither vertigo, headache, nor pain in the stomach. He recommends this means for preventing the disagreeable effects of the pipe, without compelling the individual to renounce his old habit.--*Medical and Surgical Reporter.*

MONOBROMIDE OF CAMPHOR.—Dr. Bourneville, of Paris, who has been experimenting with this new agent in certain nervous affections, says (Practitioner) that in *insomnia* he gave it in two cases—to one in four-grain doses at bed-time, and to the other eight grains—with the effect of securing sleep. In three cases of chronic paralysis agitans the monobromide diminished the agitation and slightly increased sleep. An excessively chronic and violent case of chorea was much tranquilized while taking the drug. In *hystero-epilepsy*, of which Dr. B. had two cases, he gave eight to ten grains of the medicine daily, increasing the quantity by two grains every five days, with notable amendment. In five cases of *epilepsy*, all of long-standing, the results, without being conclusive, were sufficiently satisfactory to encourage a further trial of the remedy. Dr. B. exhibits the monobromide in pill, or dragée, and hypodermically. For the first he covers two grains of the monobromide with a sufficient quantity of sugar to preserve it from contact with the air and facilitate its administration. For hypodermic use he dissolves forty-five grains of the monobromide in nine drachms of alcohol and four and a half drachms of glycerine, and of this solution injects from forty to fifty drops.—*American Practitioner.*

PROTECTION FROM YELLOW FEVER. — In a report on yellow fever, recently published in the United States, it is shown that this disease has never appeared in any climate at the height of 2,500 feet. In the Island of Dominica, a hill-top not more than 1,500 feet high is always healthy, even when the fever is epidemic at its base. In San Domingo similar observations have been made. The highest elevation at which yellow fever has occurred in the United States is 460 feet, in Arkansas; and the medical men of this country now hold that the stratum of air

infected by the poison is heavier than pure air, and therefore sinks, and they recommend that in unhealthy districts houses and hospitals should be built on tall piles, so as to be above the fever stratum. But where hills are near, the best remedy will be to carry the patients up to a height of 500 feet.

Gynecology and Diseases of Children.

The Condition of the Uterus Five Weeks after Delivery.

BY WILLIAM F. JENKS, M.D.,
One of the Surgeons to the State Hospital for Women.

An opportunity was lately afforded me of examining the condition of the uterus five weeks after delivery, when the following questions suggested themselves for investigation in the study of the specimen.

1st. From what tissue does the newly developed muscular fibre take its origin?

2d. Is the process of fatty degeneration completed at this date?

3d. What is the condition of the mucous membrane?

4th. How far have the blood-vessels taken part in the changes which the uterus has undergone?

After delivery, as we know, the gigantic muscular fibre cells undergo fatty degeneration and are absorbed, and in their place we find myriads of newly created cells, having all the characteristics of unstriped muscular fibres. From what source does this renewal of tissue take place? This investigation is exceedingly difficult, because there are few questions in histology more delicate than the diagnosis of smooth muscular fibre from the spindle-shaped connective tissue cell. The distinguishing mark usually relied on is the shape of the nucleus, which, in the first, is an elongated oval, with rounded extremities, while that of the connective tissue cell is drawn out into sharp prolongations at both poles. While this is usually true, the exceptions are numerous, and Prof. Arnold, of Heidelberg, who has won especial distinction by his investigations regarding the unstriped muscular fibre, confesses that while the nucleus is generally rounded, still it may be pointed at one

or both poles, so that practically this fine theoretical distinction can hardly avail us in studying an individual cell. The fact, however, that muscular tissue is stained yellow by picric acid, while the connective tissue is not affected by this agent, assisted me in the study of this specimen; and I have been led to coincide with the opinion now held by some of the best histologists, that the reproduction is effected through the medium of the connective tissue cell in a way with which we are familiar from the study of the process of repair in other organs, viz: by their proliferation and division, forming thereby indifferent or embryonic cells, which subsequently develop into the unstriped muscular fibre. I have been led to this conclusion from the fact that I can find no evidence of the division of the nucleus of the fatty degenerated muscular cell, while it is contrary to the laws of reproduction to suppose that a cell, itself undergoing death by molecular fatty degeneration, should manifest the highest attribute of life, viz: the production of a new cell endowed with all the marvellous attributes of vitality. In studying the process of fatty degeneration in other organs, we find that the nucleus, although retaining its function and form longer than the protoplasm, does itself in turn succumb, and finally is converted into fatty molecules, which may subsequently be absorbed. The parenchyma of the uterus submitted to me for examination was, however, infiltrated with small round young cells, such as we meet with in the repair of every tissue after injury, to which the name of embryonic or indifferent cells has been given, because they are impressed with the type of the tissue in which they are generated, and are capable, like the cells which we find in the germinal mass or vittelline sphere in the embryo, of development into muscular nervous or osseus tissue. On examining the external muscular layers of the organ, the remains of the old hypertrophied muscular fibre were evident; the individual cells, however, were much diminished in size and filled with fatty granules; but nowhere else in the uterus was there a trace to be found of the former muscular structure; hence the inference is rendered probable that the process of rejuvination proceeds from within outwards, and approaches completion at or near the fifth week after parturition; and this opinion coincides nearly with that of Heschel, who states that the fatty degeneration and absorption of the old muscular structure is not completed before, nor does it continue after the eighth week. Priestly, in his treatise on the "Gravid Uterus,"

writes that the colossal muscular fibres are not found after the third week, the middle coat now consisting of embryonic cells.

The view of Cruveilhier, that after delivery the entire mucous membrane of the uterus is thrown off, so that the inner surface of the organ resembles a stump after amputation, is now generally abandoned, a delicate layer of decidua cells always remaining, from which the reproduction of the new mucous membrane takes place, the process commencing even during the later months of pregnancy. In this specimen the newly-formed mucous membrane was everywhere apparent, except over the placental site, which still projected somewhat above the general surface, the blood-vessels filled with the contracted physiological thrombi. The glandular structure was also reproduced in this new lining membrane. This hypertrophy and subsequent degeneration of muscular tissue was not confined alone to the parenchyma of the organ, for the muscular coat of the arteries showed also, here and there, cells in a state of fatty degeneration, and newly developed embryonic cells.

My attention has been especially directed to this microscopic examination, from the fact that at present the dietetic management of the puerperal state is a question which is being earnestly discussed. I cannot but believe that, during the time when this active process of involution is taking place, not only in the uterus, but also in the walls of the vagina, and the ligaments which aid in supporting the womb, while the organ itself is greatly increased in weight with diminished tonicity, a rest in bed for ten days or two weeks, and subsequently a careful return to any active exercise, is plainly indicated. In this opinion I am the more convinced from the fact that in a dispensary practice, where the patients are drawn from the poorer class in society, unable or unwilling to submit to restraint after confinement, by far the commonest form of uterine disease is subinvolution of the uterus after delivery or abortion, with its attending ills of displacements, and chronic catarrhal conditions of the mucous membrane.

These are essentially chronic conditions, slowly developed, depending for their existence on structural changes in the tissues, or rather on the *arrest* of certain changes which, physiologically, should take place, which are not, however, normally completed until the expiration of a month or more after delivery. Therefore, in estimating the value of any mode of treatment of the puerperal

woman, her condition, six months or a year after her confinement, must be the criterion, and not her general health a month after delivery. Even if this condition of subinvolution exists, the physical signs and symptoms are manifested only when the enlarged and indolent organ, engorged in consequence of a sluggish circulation—which is in part due to the implication of the muscular tissues of the blood-vessels in this arrested repair—sinks deeper into the cavity of the pelvis. The uterus usually becomes retroverted as it descends, inasmuch as it does not receive the proper support from the relaxed ligaments, vaginal walls, and perineal body, while the mucous membrane, owing to the passive congestion of the blood-vessel system, passes into a state of chronic catarrh, and the accompanying disturbances, both local and sympathetic, from this enlargement; structural change, and displacement of the organ, slowly but surely develop themselves at a later period.—*Obstetrical Journal*.

TUBERCULAR SPINAL MENINGITIS WITH DEPOSIT OF TUBERCLE IN THE LIVER AND PERITONEUM (*The Indiana Medical Gazette*, July 1, 1874).—Surgeon-Major J. Wise reports a case of tubercular deposit in the meninges of the cord, attended by choreic disturbances, great hyperæsthesia of the surface, active delirium, paralysis of the legs, peritonitis, and a fever, which at first assumed a regular remittent, and then an intermittent, form.

At the autopsy, in addition to the tubercles found in the spinal membranes, the capsule of the liver was found to be studded with them, and the whole of the peritoneal covering of the bowels was infiltrated with hard miliary tubercles.

THERE is a great deal we never think of calling religion that is still fruit unto God and garnered by Him in the harvest. The fruits of the Spirit are love, joy, peace, long suffering, gentleness, patience, goodness. I affirm that if these fruits are found in any form, whether you show your patience as a woman nursing a fretful child, or a man attending to the vexing details of business, or as a physician following the dark mazes of sickness, or as a mechanic fitting the joints and valves of a locomotive; being honest and true besides, you bring forth fruit unto God.—*Robert Collyer*.

Public Health and Vital Statistics.

State Board of Health.

Abstract from the Reports of Deaths and their Causes in the following Cities and Towns in California, during September, 1874.

CITIES AND TOWNS.	Total No. Deaths.	PREVALENT DISEASES.						AUTHORITIES.
		Consumption.	Other Diseases of Lungs.	Dis. Stomach and Bowels.	Diphtheria.	Scarlatina.	Typho-malarial Fevers.	
San Francisco	317	44	23	39	3	19	13	S. F. B'd of Health.
Sacramento	21	2	1	1	0	0	1	Sac. B'd of Health.
Petaluma	7	0	0	0	2	1	1	Dr. G. W. Graves.
Dixon	4	0	0	1	0	0	1	Dr. A. H. Pratt.
Stockton	10	1	0	3	0	1	1	Stockton B'd Health.
Marysville	14	2	0	1	0	0	3	Dr. A. B. Caldwell.
Placerville	1	0	0	0	0	0	0	Dr. E. A. Kunkler.
San Diego	4	1	0	0	0	0	0	Dr. T. C. Stockton.
Oroville		..	.	..	.	..	.	Dr. J. M. Vance.
Los Angeles	26	5	2	4	0	2	2	Dr. H. S. Orme.
Truckee	3	0	0	0	0	0	0	Dr. Wm. Curless.
St. Helena	3	1	1	0	0	0	0	Dr. C. F. A. Nichell.
Napa City	8	0	1	0	0	0	3	Dr. M. B. Pond.
Watsonville	3	0	1	0	0	0	0	Dr. W. W. Ross.
Folsom	4	0	0	0	0	0	1	Dr. S. Lyons.
Santa Cruz	5	1	0	2	0	0	0	Dr. C. L. Anderson.
Suisun, Fairfield	5	2	0	0	0	0	0	Dr. S. D. Campbell.
Colusa	5	1	1	0	0	0	1	Dr. Luke Robinson.
Trinity County	3	0	0	0	0	0	0	Dr. J. C. Montague.
Santa Barbara		..	..	.	.	..	.	Dr. C. B. Bates.
Redwood City and sur.	6	0	0	1	0	0	0	Dr. C. A. Kirkpatrick.
San Andreas	1	0	0	1	0	0	0	Dr. C. B. Robertson.
Auburn		..	..	..	.	..	.	Dr. A. S. Dubois.
Tulare County	...	..	..	..	.	..	.	Dr. M. Baker.
Siskiyou County	4	0	0	1	0	0	1	Dr. Daniel Ream.
Susanville and sur.		..	..	..	.	..	.	Dr. J. J. Sawyer.
Downieville	1	0	1	0	0	0	0	Dr. Alemby Jump.
Healdsburg		..	..	..	.	..	.	Dr. J. Bradford Cox.
Michigan Bluffs		..	..	..	.	..	.	Dr. J. L. Jackson.
Pajaro	0	0	0	0	0	0	0	Dr. Nichols.
Sierra City		..	..	..	.	..	.	Dr. L. F. Jones.
Oakland		..	..	..	.	..	.	Board of Health.
Antioch	1	0	0	0	0	0	0	Dr. M. C. Parkison.
Salinas and sur.		.	..	..	.	..	.	Dr. W. W. Davies.
Woodbridge and sur.		..	..	..	.	..	.	Dr. A. Trafton.
Cloverdale and sur		0	0	0		0	0	Dr. Q. C. Smith.
Yolo County	4	1	0	1	0	0	0	Dr. E. Parramore.
San Bernardino	2	0	0	0	0	0	0	Dr. M. R. Fox.
Woodland	4	2	0	1	0	0	0	Dr. Thos. Ross.

Remarks—The low death-rate noted last month is still more marked in the above table. Notwithstanding, our correspondents report a considerable increase of malarial fevers, especially in the San Joaquin Valley. As an instance, however, of the mildness of the type of these fevers, and, at the same time, to show their relative proportion to all cases of sickness, we cite the report of our correspondent in Antioch. Of 45 cases of sickness, under medical treatment, in this locality, 40 per cent. were intermittents and remittents; and no deaths occurred, among the total number sick, during the month, except the one enumerated in the table, of a newly-born infant from convulsions. The only place showing an increase of mortality is Napa; and strange to say the cause is put down to fever. As this town is noted for its exemption from malarial diseases, doubtless these cases came from abroad.

THOMAS M. LOGAN, M. D.,
Permanent Secretary State Board of Health.

American Health Association in Philadelphia.

"I saw a good deal of the medical profession in Philadelphia, and Professor Gross, the patriarch of the faculty, rejoiced in the large number of guests from every quarter who had been called together by the Convention of the American Health Association. They were a fine body of men, with kindly, earnest, searching faces, and looking for the roots of suffering, and earnest to take them out. Too much importance cannot be given to their deliberations, and their papers and speeches are worthy of being circulated in every city and village in the land. The time has come for us to know and obey all the laws of our being, as well as the civil law; and there was much dignity, as well as wisdom, in the address of Dr. Stephen Smith, President of the Association, in which he demanded from the Government and people public and legal recognition of the laws of health, and of the men and the methods needed for carrying them out."—*Correspondence of the Alta.*

LITTLE sins open the door for a great sin.

Monthly Report of Deaths Registered in San Francisco during November, 1874.

Cause of Death.	Total.	Per Cent.	AGES. Under 5 Years.	From 5 to 20 Years.	From 20 to 50 Years.	From 50 to 70 Years.	Over 70 Years.	SEX. Male.	Female.	NATIVITY. California.	Other Parts of U. S.	China.	Other Countries.
1—Small Pox	....	....	....	....	....	....	..	....	....	....	....	....	....
Measles	1	....	1	....	....	....	..	1	....	1	....	....	....
Scarlatina	11	...	6	4	1	....	..	2	9	10	....	....	1
Diphtheria	5	....	2	2	1	....	..	....	5	4	....	....	1
Croup	5	....	5	....	....	....	..	2	3	5	....	....	....
Whooping Cough	1	....	1	....	....	....	..	....	1	1	....	....	....
Typhus and Typhoid Fevers	12	....	2	5	3	1	1	7	5	4	2	....	6
Diarrhœa and Dysentery	5	....	3	....	1	1	..	3	2	3	1	....	1
Cholera Infantum	6	....	6	....	....	....	..	3	3	6	....	....	....
Cholera Morbus	....	....	....	....	....	....	..	....	....	....	....	....	....
Pyemia	3	....	....	....	3	....	..	3	....	....	....	....	3
Cerebro-Spinal Meningitis	....	....	....	....	....	....	..	....	....	...	....	....	....
Syphilis	....	....	....	....	....	....	..	....	....	....	....	....	....
Alcoholism	3	....	....	....	3	....	..	2	1	....	....	....	3
2—Cancer	5	....	....	....	1	3	1	4	1	....	2	....	3
Phthisis Pulmonalis	39	....	2	2	32	2	1	26	13	3	9	3	23
Hydrocephalus & Tubercular Meningitis	4	....	3	1	....	....	..	2	2	4	....	....	....
3—Encephalitis	14	....	6	4	3	1	..	8	6	10	1	....	3
Apoplexy and Paralysis	8	....	....	....	4	3	1	7	1	....	2	....	6
Convulsions	12	....	12	....	....	....	..	9	3	11	1	....	....
Other Diseases of the Nervous System	16	....	7	....	5	3	1	12	4	7	3	....	6
Aneurism	2	....	....	....	1	1	..	2	....	...	1	....	1
Diseases of the Heart	16	....	....	3	7	5	1	12	4	2	4	....	10
Pneumonia	17	....	7	1	5	4	..	11	6	6	3	....	8
Bronchitis	3	....	2	....	....	....	1	2	1	2	....	....	1
Other Diseases of the Respiratory Organs	8	....	2	....	6	....	..	6	2	2	....	....	6
Diseases of the Stomach and Bowels	8	....	3	....	2	1	2	4	4	3	....	....	5
Diseases of the Liver	10	....	1	....	7	1	..	6	4	1	2	....	6
Bright's Disease and Nephritis	....	....	....	....	....	....	..	....	....	....	....	....	....
4—Puerperal Diseases	3	....	....	....	3	....	..	....	3	....	1	....	2
Atrophy, Inanition and Old Age	29	....	24	....	1	2	2	14	15	24	3	....	2
5—Suicides	1	....	...	....	1	....	..	1	....	....	....	....	1
Deaths in Institutions	64	....	12	1	40	9	2	51	13	12	11	....	41
Still-Births	....	....	....	....	....	....	..	16	7	....	....	....	....
1—Zymotic Diseases	57	18.1	28	12	13	3	1	24	33	36	4	....	17
2—Constitutional Diseases	53	16.9	8	3	34	6	2	36	17	10	11	3	28
3—Local Diseases	123	39.2	40	9	44	23	7	84	39	45	17	2	58
4—Developmental Diseases	40	12.7	32	....	4	2	2	17	23	32	4	....	4
5—Deaths from Violence	14	4.5	2	1	8	2	1	11	3	4	3	1	6
Deaths from Unknown Causes — Chinese	26	8.3	1	2	22	1	..	24	2	1	....	25	....
Deaths from Unknown Causes — Others	1	.3	....	....	1	...	..	....	1	....	1	....	....
Total	314	.....	111	27	126	37	13	196	118	128	40	31	113
Per Cent. to Total Mortality	....	100.00	35.4	8.6	40.2	11.7	4.1	62.4	37.6	40.8	12.7	9.9	36.0

HENRY GIBBONS, Jr., M. D.,
Health Officer.

Conference of Boards of Public Health, Held at New York, May, 1874.

SECOND SESSION.

On Friday, May 22d, at 10 A. M., there was held a joint session of the Boards of Health and Public Charities, at which but one paper was read, the session being mainly occupied in discussion and in the consideration of the preliminary reports of the committees appointed at the conference of Boards of Charities on the Wednesday previous, of which mention has been made in the sixth number of the *Journal*. At the Friday's conference Dr. Stephen Smith, of New York, presided, and Dr. Harris acted as Secretary. Dr. Smith opened the session by reading a paper on the "Powers and Duties of City Boards of Health," in which he alluded to Dr. Harris's paper on Registration, and said that it is a fundamental duty of such Boards to organize a complete registration of the vital statistics of the city. It is such registration alone that can lay the foundation of permanent sanitary work, nor is it sufficient that it should simply give the total number of marriages, births, and deaths annually. It should furnish all those collateral facts and evidence which are necessary to a thorough study of the intricate and obscure questions relating to the social and physical well-being of the people. Coming to the subject of sanitary precautions, he said that most contagions may be warded off and restricted by the isolation of the sick. It is not too much to say that small-pox, scarlatina, and other diseases may be tolerated or suppressed at will by such measures. Against small-pox, no intelligent physician doubts that any city may be absolutely protected. Measles and other such affections are not less susceptible of control by isolation and disinfection. Endemic diseases are mainly due to imperfect scavenging and defective methods of dealing with excremental matters, both personal and domestic, such as the decomposing refuse of kitchens, overflowing cesspools and privy vaults, cellar damps, etc. To discover and cause the abatement of these gross nuisances against public health, as well as against public decency, is evidently the province of sanitary officers. Their duties should also embrace the proper regulation of trades causing sickness, so as to protect the health of operatives, and the dwellers in the neighborhood who are subjected to deleterious gases that create sickness, or

offensive odors which compel them to shut out from their houses the external air. In short, it is sufficient to summarize sanitary duties as follows: (1) Regulation of commerce and immigration that will prevent the admittance of exotic pestilences to the cities, either in the cargo or among the passengers. (2) Persons suffering from contagious diseases must be rigidly isolated; and (3) trade and business causing special forms of disease among operatives or among the people must be placed under such regulation as will effectually remove all causes and sources of sickness.

Health boards are required not only to study the bearing which all existing public works and all projected public improvements have upon the public health, but they must come down to the individual, and study the influences which affect his general health and tend to invalid him and shorten his life. These influences may be grouped as follows: First, drainage; second, food supply; third, water supply. A sanitary board should, from its peculiar constitution, be the ablest and wisest authority in at least three departments—medicine, law, and mechanical engineering. Thus constituted, the community may safely commit to its care the varied duties and numerous trusts which devolve upon the guardians of the public health. In its connection with other government departments it should always demand all such restrictions of their action as it may judiciously deem detrimental to the health of the community. Steps are being taken in the right direction in the formation of such boards in the larger cities; and not only is State medicine beginning to be recognized as an essential feature of municipal government, but there is a healthy tendency toward the selection of the best qualified officers for sanitary administration.

Preventive or State Medicine is of recent origin. It has been the natural outgrowth of modern thought and resources, stimulated by centuries of suffering and by the sacrifice of multitudes of human beings. Modern thought, later and more scientific methods of investigation, and more rapid means of communication of thought and of action, have given this idea to the nations. It is true that Hygiene, or the science which would promote human health, has been discussed from earliest times, but commonly as applied to the individual man. The scientific study of the laws of disease as they affect large masses of men, and the voluntary efforts of great states to study those laws by means of boards of health, or of experts set apart for this special purpose, are strictly of modern origin.

Hippocrates, wise as he was, could not, with the imperfect means of communication in his day, have inaugurated it. Moreover, in the earlier states, man as an individual never stood, in the estimation of his fellows, nor of the government, so high as he does at the present day under European and American civilization. Formerly his welfare was subordinated to that of the state. Now, the theory is exactly the reverse, and the state claims to have the tenderest interest in the welfare of each and every one, the humblest or richest of its citizens. Formerly, all persons believed, as many now believe, that prayer should be offered to the offended gods in order to stop plagues, famine, and death. But now, most persons feel that, although prayer may avail much to enable an individual or a state to bear calmly some terrible calamity or to die bravely, if need be, in a great cause, it can never drive away fever, cholera, nor small-pox. It can never cure consumption, though it may help both sufferer and friends to bear it more patiently. To submit quietly to any remediable evil, as if to the will of Providence, is not now considered an act of piety, but an unmanly and really irreligious act. It is the part of error and stupidity which does not believe in the duty of studying into the physical causes of disease, and in at least endeavoring to crush out these originators of pestilence and of death.

PREVENTION OF FIRES.

"The State Board of Health, in their active efforts to promote the public health and safety, have done signal service to property-holders and fire-underwriters by their attempts to sustain and carry out the requirements of the Michigan law relative to the inspection and sale of illuminating oils. It is well known that the use of many marketable illuminating oils is very destructive to human life, and the fruitful source of accidents and disastrous fires. In the valuable paper prepared by Professor R. C. Kedzie, on the subject of 'Illuminating Oils in use in Michigan,' published in the recent report of the State Board of Health, it is shown as the result of actual experiment that very much of the oil manufactured in and imported from the adjoining State of Ohio is far below the standard of safety established by the law of this State, and is extremely dangerous. He characterizes the fancy-named 'French Burning Oil,' 'Sunlight Oil,' or any compound of naptha or benzine, as a 'death-warrant in the hands of the user, which a stumble may convert into an executioner at any moment.'"

The publication and distribution of the article on poisonous papers has had the effect of bringing to light many cases of obscure forms of lingering disease in persons occupying rooms, the walls of which were covered with paper colored with arsenical pigment. It is becoming a matter of surprise, even to physicians who have given the subject most attention, to find how generally these poisonous papers are distributed, and how many cases like those heretofore supposed to be due to that indefinite and unknown influence called "malaria," recover on removal from rooms where the patient is subjected to the dust, and possibly other emanations, from arsenical pigments.

Extract from Report of Surgeon-General J. K. Barnes, United States Army.

Of the Second Part of the Medical and Surgical History of the War, seven hundred (700) pages have been printed, and nearly all the plates have been prepared.

In accordance with the Act making appropriations for sundry civil expenses of the government for the fiscal year ending June 30th, 1874, and for other purposes, approved June 23d, 1874, proposals have been obtained for preparing the plates for a new edition of five thousand (5,000) copies, which have been approved by the Honorable Secretary of War, and the work is now in progress. That part of the work now going through the press is being stereotyped. Legislation is necessary to authorize the Congressional Printer to print an additional edition of five thousand (5,000) copies from the commencement of the work, and I respectfully recommend that such authority be given.

The Library of this office continues to increase in size and usefulness. About five thousand (5,000) volumes have been added to it during the past year. The printing of the Alphabetical Catalogue of Authors has been completed, and a Subject Catalogue is now in course of preparation.

In accordance with the joint Resolution of Congress, approved March 25th, 1874, Assistant-Surgeon Ely McClellan, United States Army, was detailed to inquire into, and report upon, the causes of epidemic cholera, and was instructed to visit the towns and localities in the United States at which cholera prevailed during the year 1873.

His report is now in course of preparation, and will be in readiness by the time of meeting of Congress.

In the re-organization of the force of this office by the Act making appropriations for the legislative, executive and judicial expenses of the government for the fiscal year ending June 30th, 1875, and for other purposes, approved June 20th, 1874, no provision was made for the continued employment of the chemist and his assistant. I have in consequence been compelled to suspend work in the laboratory, thus depriving this department of the protection and advantage of careful and reliable analyses of drugs and medicines, and making it impossible to furnish, as heretofore, other departments of the Government with results of examinations for detection of adulterations, or establishment of values, for guidance in selection and purchase.

During the month of June, 1874, an arrangement was made with the chief Signal Officer of the Army by which the monthly reports of the meteorological observations made at the several military posts by the Medical Officers of the Army were to be forwarded to him, hereafter, as received at this office. This proposition was made in the belief that these observations possess considerable value, and that their utility will be increased by studying them in connection with the observations made under the auspices of the Signal Corps.

The requirements of the Army as to Medical Officers are shown by the following statement:

Number of permanent posts	174
" " temporary posts and sub-stations	36
Total	210
Number of Medical Officers on special duty as Medical Directors of Departments; at Soldiers' Home; preparing reports ordered by Congress; in the Surgeon-General's Office; and on Medical Examining Boards now in session	23
Number of Contract Surgeons on duty as Attending Surgeons at Recruiting Stations and in cities not reckoned as posts	14
Number of Posts at which two or more Medical Officers are required *	45
Number of Military Expeditions during the current year	13

* The number of Medical Officers required at a Post is fixed by the Department Commander.

Number of Scouting parties..... 67

With the thirteen (13) expeditions, twenty-five (25) Medical Officers were required; with the sixty-seven (67) scouting parties forty (40) Medical Officers were on duty.

The average number of Medical Officers absent on leave and on account of sickness is twelve (12).

To meet the above demands there are now in service fifty-one (51) Surgeons, ninety-four (94) Assistant-Surgeons, and one hundred and eighty-seven (187) Contract Surgeons; in all three hundred and thirty-two (332).

The Act re-organizing the Staff Corps of the Army, approved June 23d, 1874, while allowing appointments of Assistant-Surgeons in the Army, cuts off two of the five Lieutenant-Colonels and ten of the sixty Majors, thus preventing any promotion for several years to come. This is much to be regretted, as it places the officers of the Medical Corps below those of all other Staff Corps and of the Line of the Army as regards promotion, which is felt by them as a hardship and injustice, the results of which cannot fail to be injurious to the best interests of the service.

The clause of the same Act which specifies that "the number of contract surgeons shall be limited to seventy-five on or before the first day of January, in the year eighteen hundred and seventy-five, and thereafter no more shall be employed," must result either in actual suffering for want of medical attendance, or in largely increased expense to the government. The number of candidates presenting themselves before the Examining Boards for the position of Assistant Surgeon is not large, and probably not more than twenty-five will pass the examination by the first of January, to take the place of over one hundred (100) contract surgeons to be discharged under the above law. The only resource will be to employ local physicians without contracts, and pay them the ordinary fees of private physicians —which past experience has shown will cost much more and be less satisfactory than the present system.

At date of last report there existed sixty-four (64) vacancies in the Medical Corps, viz.: two (2) Assistant Medical Purveyors, five (5) Surgeons, fifty-six (56) Assistant Surgeons and one (1) Medical Storekeeper.

During the past year three (3) Surgeons and one (1) Surgeon (retired) have died, and one (1) Surgeon has resigned; the vacancies in the grades of Assistant Medical Purveyor, Surgeon and Medical Storekeeper were abolished by Act of Congress approved June 23d, 1874; leaving at

present fifty-six (56) vacancies in the grade of Assistant Surgeon.

J. K. BARNES,
Surgeon-General United States Army.

Alarming Outbreak of Scarlet Fever in East London.

At the last meeting of the Mile End Vestry a letter was received from the school-mistress of an establishment for infants in the district, stating that three children formerly attending the school had died from scarlet fever. In spite of every precaution several other children had contracted the disease, and were away from the school. The writer added that she could not help thinking that the drainage, together with the over-crowded and dirty condition of some of the houses, tended to spread, if not induce fever. In one house quite close to the school a child was lying dead, and yet six persons were sleeping in the same room. In reply to questions, Dr. Corner, the medical officer of health, stated that there had been a considerable number of deaths from scarlet fever in the district; but he failed to find evidence of great over-crowding. It was eventually decided to forward copies of the report sent up by a committee recommending disinfection of the house *and the schoolmistress's letter* to the School Board. At the weekly meeting of the Mile End board of guardians it was resolved, on the suggestion of Dr. Loane, the house doctor, to prohibit the friends of the inmates from visiting whilst the scarlet fever was so prevalent. In the Poplar District, comprising the three parishes of Row, Bromley, and Poplar, a total of 48 cases of scarlet fever had been reported to the sanitary committee, of which 23 had proved fatal. Fourteen fatal cases were reported to St. George's East Vestry at their last meeting, whilst in the Whitechapel district fevers of all kinds are prevalent, the enteric type predominating. At each of the boards *general sympathy was expressed*, and it was ordered that disinfectants in every instance be supplied, and that where necessary, to prevent the fever spreading, the bedding, &c., be entirely destroyed.—*Medical Press and Circular.*

In California we do not disinfect the schoolmistress' letter, nor pass a resolution "to express general sympathy."

We keep our Hospitals disinfected and save more than 23 in 48 cases.

Scientific Proceedings.

ACADEMY OF SCIENCE.

A Brief Session—Donations to the Cabinet and Library—Short Communications, Etc.

The Academy of Science held its regular session last evening. The attendance was slim. After ordinary preliminaries

THE CABINET

Was added to as follows: A lot of fossil bones from Placer county, donated by R. H. Lloyd; a collection of American and European birds' eggs, by W. T. Blunt; a lot of fossils from Monterey county, by Dr. J. G. Cooper; shells from Ounalaska, by the Alaska Company; specimens of iron ore found in West Hartley coal, by William Russell.

The customary periodicals were received for the library.

WRITTEN COMMUNICATIONS.

A very short paper on the "Tertiary Formation of California," by Dr. J. C. Cooper, was read by the Secretary.

"Plains and Valleys of California," a paper by Judge Hastings, was very brief but quite interesting. The Judge also read a paper on the "General Theory of Earthquakes."

Henry Edwards presented his eleventh paper on the "Pacific Coast Lepidoptera." It was placed on file without being read.

The Committee on Nominations of Officers was instructed to bring in its report at the next meeting, December 21st.

The business being finished, the Academy adjourned.—*Alta.*

Microscopical Society of Memphis, Tenn.

A paper contributed by J. Edward Smith, of Ashtabula, Ohio, on the use of Dammar varnish as a mounting medium for test objects, was read to the society. Mr. Smith has

found, from numerous experiments, that the varnish renders objects much more difficult of resolution than balsam. The increased transparency obtained by the use of the varnish seems to him to be the chief cause of the difference. The Dammar mounts, according to Mr. Smith's experiments, utterly defeated a Tolles immersion 1-10 three system objective, which would readily dissolve the same specimens when mounted in balsam. A Tolles new four system 1-10 objective, however, readily resolved the Dammar slides, though the same result could not be obtained by the use of any of the old objectives from 1-10 to 1-50.

A paper was also read from G. W. Morehouse, of Wayland, New York, on the comparative results obtained by the use of Tolles's old three system, 1-50, and the new four system, 1-10. Mr. Morehouse states that the best work of the former was unequivocally excelled by the performance of the latter. This is a great gain, as the 1-10 gives a great increase of light, and a better definition, as compared with the 1-50. The most remarkable point in Mr. Morehouse's investigation is this: That the optician can, by a new and simple combination of lenses, with a focal distance as low as one-tenth of an inch, secure better performance than can be obtained by the old system, 1-50 of an inch focal distance. This seems to be the greatest triumph of the optician's art, as regards the construction of objectives.

A communication from J. Edward Smith fully corroborated the comparative statements of Mr. Morehouse. — *Memphis Daily Appeal*, December 5th, 1874.

Editorial.

TIME'S rapid fingers have nearly turned the last leaves in the year's volume of life's daily pages. We present to our readers the most friendly "compliments of the season," and the Index to our year's transactions. To them all we quote the affectionate words of one of San Francisco's distinguished oracles. Its kindly thrill will awake a harmonious welcome in every ear: "May the Lord love us, and not call for us too soon."

Cremation.

From the *Sanitary Journal*, devoted to Public Health, November, 1874, Toronto:

"The authorities of the city of Vienna have decided to establish in the cemetery the necessary apparatus for cremation, for the use of those who prefer this method of disposing of the bodies of their deceased friends."

It will require much argument to win advocates in America to this mode of reducing dust to dust. If to anticipate would evade the fiery ordeal of the future, it might prove a healthful precaution. The preventive "stitch *in time*," to save the nine *in futuro*, might be wise practice. But so long as the devotion, the love, and the poetry of civilization exist, so long as fond memories are so sacredly and so tenderly woven around the forms of the loved and the venerated, will the heart's finest sympathies revolt against the horrid thought and loathsome process.

Book Reviews.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE: Edited by Dr. H. von Ziemssen, Professor of Clinical Medicine in Munich, Bavaria. Volume 1. ACUTE INFECTIOUS DISEASES. By Professor Liebermeister, of Tubingen, Professor Lebert, of Breslau, Dr. Haenisch, of Griefswald, Professor Heubner, of Leipzig, and Dr. Oertel, of Munich. Translated by R. H. Fitz, M.D., and Charles P. Putnam, M.D., of Boston; Arthur Van Harlingen, M.D., of Philadelphia; James T. Whittaker, M.D., of Cincinnati; Edward W. Schauffler, M.D., of Kansas City; and Francis Delafield, M.D., Horatio Bridge, M.D., Thomas E. Satterthwaite, M.D., Lewis A. Stimson, M.D., J. Haven Emerson, M.D., and Norman Smith, M.D., of New York. Albert H. Buck, M.D., New York, Editor of American Edition. New York: William Wood & Co. 1874.

A cursory glance at the first volume of this great work, —coming in to us too late to review in this month's WESTERN LANCET—permits the assurance to our readers, in its

general aspect, the elegance of its publication in New York by William Wood & Co., and the comprehensive scope of the enterprise, that this coming Cyclopædia must supersede its predecessors. Why should the numerous costly Cyclopædias in different languages which load the library be superseded by this fresh emanation from the laboratory of science? Because the last thirty years' product of the laboratory has created an unprecedented revolution. To be posted in the new lore is as indispensable to the veteran as it is essential to the neophyte; and while the invitation to so often purchase new Cyclopædias may be rather exacting, it is the honor as well as the necessity of the last four decades.

To estimate the promise this work offers it may be asked, Who are its authors?

Hugo Wilhelm von Ziemssen, the Editor, was born, December 13th, 1829, at Griefswald, on the Baltic Sea. After having finished his studies at the High School (Gymnasium) of his native town, he studied medicine at Berlin in 1849, at Wurtzburg in 1850 and 1851, and at Griefswald in 1852 and 1853, from which latter university he received the degree of Doctor of Medicine in 1853. In 1856 he was appointed Assistant Physician to the medical clinic and polyclinic at Griefswald, and also a Private Instructor in medicine.

Karl Liebermeister, born in 1833 in Ronsdorf, near Elberfeld, studied medicine in Bonn, Wurtzburg, Griefswald and Berlin. In 1858 he was made Assistant Physician, and in 1859 Instructor at Griefswald; in 1860 he accompanied Niemeyer as his assistant to Tubingen, where he was created Extraordinary Professor of Pathological Anatomy, then advanced to the Professorship of Clinical Medicine in Basle, and in 1871 to the same position in Tubingen.

Professor H. Lebert was born in Breslau, in 1813, and received his preliminary education in Berlin. He entered upon his university studies in the spring of 1831, and successively attended the schools of Berlin, Zurich and Paris. He received his medical degree in Zurich, and resided in Switzerland until 1846, when he commenced practice in Paris. In 1853 he was called to Zurich, to fill the Professorship of Clinical Medicine. In 1859 he was called to Breslau, where he has remained until quite recently. At the present time he is practising as consulting physician in

Vevay, Switzerland, a large part of his time being devoted to medical literature and the natural sciences.

Dr. Fritz Haenisch was born in Griefswald in 1842, and completed his course of studies at the "Gymnasium" in 1860. He then devoted himself to the study of medicine at Wurtzburg and Griefswald; graduated in 1864, and underwent his state examination during the winter of 1864–65.

Professor Heubner was born in 1843, in Muhltroff, in Saxony. From 1861 till 1866 he studied medicine at Leipzig. During the summer of 1866 he completed his studies at Vienna. From 1866 till 1871 he officiated as Clinical Assistant in the Leipzig Infirmary, at Wunderlich's clinic. In 1868 he became an Instructor at the university. In 1873 he was elected Extraordinary Professor, which position he holds at the present time.

Max Josef Oertel was born in Dillingen, Bavaria, March 20th, 1835. From 1860 to 1863 he was Assistant at the clinic, in Munich, in the division of Dr. v. Pfeufer, who died in 1869. He passed the state examination in 1863.

All these authors have distinguished themselves in Germany, and occupied high positions. Their career has been a life of industry, devoted to study, and is well known to those conversant with German literature. Under such auspices the Cyclopædia, worked up to the day, cannot fail to be the welcome guest of every library. To obtain this work it will be necessary to correspond with Messrs. Bancroft & Co., appointed sole agents by Messrs. William Wood & Co., of New York.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M.D., Professor of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons, New York; Surgeon to the New York State Woman's Hospital; Consulting Physician to the Nursery and Child's Hospital, New York; to St. Mary's Hospital for Women, Brooklyn; Honorary Fellow of the Obstetrical Society of London; Corresponding Member of the Obstetrical Society of Berlin, of the Gynæcological Society of Boston, of the Medical Society of Lima, Peru, of the Obstetrical Society of Philadelphia; Honorary Member of the Louisville Obstetrical Society. Fourth Edition, thoroughly revised. With one hundred and eighty-six

illustrations on wood. Philadelphia: Henry C. Lea. 1874.

To this work, the author's own preface is the best introduction of his fourth edition which can be presented.

Its being found worthy of translation to rank among the classic works of European celebrity is certainly eulogy enough. We, of the distant Western slope, cannot pretend to further contribute than by recommending all interested to buy it, to read it and then learn and inwardly, psychologically we mean, digest it.

PREFACE TO THE FOURTH EDITION.

In presentiug this, the fourth edition of his treatise on the Diseases of Women, the author desires to express the great gratification which he has felt at the cordial reception accorded to the work by his professional brethren, as shown by the exhaustion of three large editions within five years, the translation of the work into German, and preparations now on foot to render the present edition into French and Italian. Stimulated by this, he has spared no pains in the revision to make the work a faithful exponent of the most advanced condition of gynecology. Many portions have been virtually rewritten, and the whole has received the most careful attention. The series of illustrations has been reduced by the omission of many which seemed to be superfluous, while a number of new ones have been introduced which it is hoped will more thoroughly elucidate the text.

To one point in the work the author would call the attention of the reader. Some of the manipulations recommended by him will be found difficult of accomplishment by the practitioner who employs the cylindrical speculum or others which are applied in the dorsal position. As examples, may be mentioned the use of the intra-uterine stem with supporting anteversion pessary, and the uterine probe. Introduced through Sims's speculum, they are easily managed; employed in any other way, their use is attended by difficulties.

It may very naturally be asked why the author, knowing as he does that the dorsal method of speculum examination almost universally prevails, teaches from the standpoint of the lateral or Sims's method? He answers the question in all candor in this way: He looks upon the introduction of the lateral method of speculum examination as a great

advance in gynecology; he regards it as a method which puts him who practices it upon a decided vantage-ground over him who employs the dorsal method; and he confidently looks forward to the day when the great superiority of the levator perinei speculum will cause it to supercede all others. He freely acknowledges that in this estimate he may be entirely in error; but so strong are his convictions that he would be recreant to them did he speak less decidedly. In the Woman's Hospital, of this city, with a surgical staff of twelve, this plan is universally adopted; and an opportunity of demonstrating its advantages always affords pleasure to the surgeons of the institution. Time, the test of the value of all things, will settle this matter, and the author, with the small minority which believes as he does, is perfectly willing to abide its verdict.

In the preparation of this edition for the press the author has been greatly aided by three of his friends, to whom he offers his sincere thanks—Drs. S. Beach Jones, Jr., James B. Hunter, and Matthew D. Mann.

ELECTRO-THERAPEUTICS: A Condensed Manual of Medical Electricity. By D. F. Lincoln, M. D., Physician to the Department of Diseases of the Nervous System, Boston Dispensary. Philadelphia: Henry C. Lea. 1874. San Francisco: A. L. Bancroft & Co.

The increasing value and importance of Electro-Therapeutics has induced us to look into this work with some care, as presenting compendiously a broadcast view of the subject. We are too grateful to the galvanic battery in many cases of nareosis and suspended animation, as well as in feigned hysteria, not to be fully imbued with the advantages to be derived from the application to the nervous system of its most nearly allied correlative force. The author devotes his first chapter to elucidate the "Law of Ohm," by which electricity is measured in regard to the quantity to be developed, and, of course, the measurement of the quantity which should be liberated and allowed to act in different cases upon the nervous system in disease. The unit of quantity is hence termed an Ohmad, from Professor Ohm, who first reduced the measurement of electric quantity to an algebraic formula. Thus: An electric current is represented by the symbol I; the electro-motive

force, which generates or causes the current, has for its symbol, E. The electric current, in its course, loses in force or tension by the impediments it meets with and has to overcome. This impediment is termed *resistance*, of which there are two, viz.:

1st. The resistance which depends on the *conductivity* of the *conductor*, relatively to its *attenuation* and its *elongation:* its symbol is *r*.

2d. Is the resistance involved in the *generation of the current;* as the current, to pass through the space between the metal plates of a cell, or element, whether that space be air, fluid, or porous substance, meets with resistance. Its symbol is R.

Hence, to calculate the quantity of electrictity in a given current—a subject of indispensable importance in applying such a vast power to the human nervous system, or, in other words, to know the measure or therapeutic dose to give—we learn "that the actual current in any given case is equal to the electro-motive force divided by the sum of the resistances;" or, algebraically, $I=\frac{E}{R \text{ plus } r}$; and this is the formula of the great "Law of Ohm." For the further development of this law see chapter 1.

The author discusses the various modes of generating electricity, and shows the best apparatus.

The succeeding chapters on Physiology, Diagnosis and Therapeutics, from the electric view point, are handled in the same scientific spirit, so that the work constitutes an excellent elementary text-book for those who desire to add to their therapeutic arcana the invaluable aid of the galvanic battery.

CLINICAL LECTURES ON VARIOUS IMPORTANT DISEASES: Being a collection of the Clinical Lectures delivered in the Medical Wards of Mercy Hospital, Chicago. By Nathan S. Davis, A. M., M. D., Professor of Principles and Practice of Medicine, and Clinical Medicine, in Chicago Medical College. Edited by Frank H. Davis, M.D. Second Edition. Philadelphia: Henry C. Lea. San Francisco: A. Roman & Co.

Professor Davis, in this work for the instruction of students, has admirably chosen his subjects for study and his cases for illustration. He selects a series of cases to demonstrate the different phases of a disease, and thus follows it in its varying progress from incipiency to its resolution by cure or death. His lecture on Tuberculosis, being a clinic for students, does not seek the histological pathology of the disease, but gives the manifest symptoms, and the student is brought personally to realize the signs, auscultation, percussion, the respiration as well as the constitutional variations. Nothing can be more thorough than his elucidation of heart diseases. In a word, his whole volume proves the experienced scholar, while his perspicuous style, comparable with the lucid diction of Trousseau, tempts the reader onward and demonstrates how dry and obscure subjects may be adorned by simple and natural language.

THERAPEUTICS AND MATERIA MEDICA: A Systematic Treatise on the Action and Uses of Medicinal Agents, including their Description and History. By Alfred Stille, M.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; Physician to St. Joseph's Hospital; Fellow of the College of Physicians, and Member of the Pathological Society of Philadelphia; Corresponding Fellow of the New York Academy of Medicine; Member of the Societe Medicale d'Observation, of Paris; Honorary Member of the Medical Societies of the States of Rhode Island, New York and California, etc., etc. Fourth Edition, thoroughly revised and enlarged. In two volumes. Volume 1. Philadelphia: Henry C. Lea. San Francisco: A. Roman & Co.

When a standard work of two 8vo. volumes, 1884 pages, presents itself in the new garb of the fourth edition, "with all the modern improvements," the reviewer's occupation is gone—Othello may sheath his weapon. The fact, is the proof of the high appreciation in the profession of Professor A. Stille's work. His indefatigable industry has made him master of the subject. We believe the book contains the marrow of Wood & Bache's United States

Pharmacopeia, with the exclusion of much that is very seldom read or referred to. His section on Narcotics (especially the introduction to it,) is clear and highly interesting. The subject of the special action of the different narcotics in localizing their influence on particular organs of the brain, the spinal cord and the ganglionic centres, has received much attention. The differentiation of the narcotics in this respect throws light on the art of discrimination in their selection, for special nervous perturbations, and no one will deny the obscurity which veils this subject. The fiat of public favor has gone forth, and we can only hope that the venerable Professor may reap a full harvest for his arduous labor.

Hurra for a title!

DISEASES OF THE ABDOMEN, STOMACH, AND "OTHER PARTS" OF THE ALIMENTARY CANAL. By S. O. Habershow, M.D., F.R.C.R. Physician TO and Lecturer ON Medicine AT Guy's Hospital.

THE MEDICAL PRESS AND CIRCULAR, No. 1861, October 14th, 1874.

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THE MEMPHIS DAILY APPEAL. November 22d.

Vol. III. DECEMBER. No. 10.

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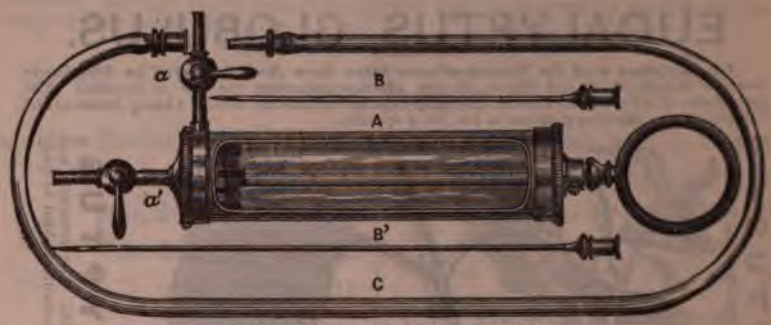

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SAN FRANCISCO

FEMALE HOSPITAL

(Supported by Voluntary Contributions and State Aid).

This Institution was established and has been in operation for four years. It is a general Hospital for indigent sick women from all parts of the State, (no contagious diseases being admitted), is particularly intended for uterine diseases and Lying-in women. We have had, during the past four years over five hundred births, nearly half being illegitimate. Unfortunate women are received into this Hospital and their state kept private. This charity is managed by twelve ladies and is entirely under their control. No exceptions made as to nativity, religion or social condition, it being intended as a pure charity for sick women.

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This hospital is specially devoted to the treatment of diseases peculiar to women. The Surgeon-in-Charge receives no remuneration for his services. Six beds are set apart for free patients; other patients are required to pay a weekly board as arranged by the Lady Managers. For admission apply to the matron of the hospital, or to

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UTERINE ELEVATOR.

The most simple and practical of any ever invented It is made of India-rubber, *without lead*, unirritating, of easy application, and unfailingly keeps the womb in its natural position. The first-class physicians in Providence, and eminent practitioners in almost every State, highly recommend it. A pamphlet describing it, and testimonials of distinguished physicians, also price list, sent on application.

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Each Disk is tested and *warranted.* Medical Electricity is easy and sure gentle as the dew, from 24 electrodes (p over local weakness, pains, and many ch *the nerves and muscles*—is invaluable. (Disk) is simply applied and *worn.* dren's, $1.50. *For sale* by best drug receipt of price, by A. C. Garratt, M.D., 6 Hamilt

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I have received a further and ample supply

"METHYLENE ETHER" o

now so largely used in the London Hospitals, a by DR. W. B. RICHARDSON, and other emin whose experience as to its superiority, both a safety, has been fully corroborated by DR. SC the San Francisco Medical Society.

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Elix. Pyro-Phos. Iron, Quin. and Strychnia.

Each teaspoonful contains one grain of Pyro-Phosphate of Iron, one of Quinia, and one-sixtieth of a grain of Strychnia.

Adult dose, one teaspoonful three times a day.

Elixir of Gentian. Ferrated.

This preparation is identical in strength to the Comp. Infusion of Gentian of the Pharmacopœa, with the addition of one grain of Phosphorated Iron to each teaspoonful.

Adult dose, a dessertspoonful.

Elixir of Hops.

This equals in strength the officinal Tincture of Hops.

Adult dose, one or two teaspoonfuls.

Elixir Valerianate of Ammonia.

(GODDARD'S FORMULA.)

Adult dose, one or two teaspoonfuls.

Elixir Valerianate Ammonia and Quinine.

This is simply our Elixir Valerianate of Ammonia, with the addition of one grain of Quinia to each fluid drachm.

Adult dose, one teaspoonful.

Elixir of the Pyrophosphate of Iron.

IRON, WITH PHOSPHOROUS AND CALISAYA.

Each teaspoonful represents the activity of five grains of Calisaya Bark, together with two grains of the Soda-Pyrophosphate of Iron.

The dose for an adult is a teaspoonful three times a day, immediately before or after meals. For children, to be graduated according to age.

Ferrated Elixir of Cinchona.

IRON, PERUVIAN BARK, AND CHOICE AROMATICS.

Each dessertspoonful, represents two grains soluble Citrate of Iron, and ten grains Red Peruvian Bark.

The dose for an adult is a dessertspoonful three times a day immediately before or after meals. For children, to be graduated according to age.

Elixir of Calisaya Bark.

Each fluid drachm represents five grains Calisaya Bark.

DIRECTIONS.—A teaspoonful for children, a dessertspoonful to adults, three times a day, or as required.

Elixir Pepsin, Bismuth and Strychnia.

Wine of Pepsin, with one grain of soluble Citrate of Bismuth, and one-sixtieth of a grain of Strychnia in each fluid drachm.

Adult dose, one teaspoonful.

Compound Syrup of Hypophosphites.

Each fluid drachm contains two grains Lime, two grains Soda, one grain Potassa, one-half grain Iron.

Adult dose, one teaspoonful three or four times a day.

Compound Syrup of Phosphates, or Chemical Food.

COMPOSED OF THE PHOSPHATES OF LIME, SODA, POTASSA AND IRON.

Each fluid drachm contains one grain freshly precip. Phosphate of Iron, two grains Phosphate Lime, one grain Phosphate of Soda, one-half grain Phosphate of Potassa, with slight excess Phosphoric Acid.

Adult dose, a teaspoonful.

Bitter Wine of Iron.

CITRATE OF IRON AND PERUVIAN BARK.

Prepared with Sherry Wine, Calisaya Bark, and Citrate of Iron. each fluid drachm represents two grains of the ferruginous salt, and the activity of five grains of Calisaya Bark.

Adult dose, a teaspoonful immediately before or after each meal.

Ferrated Cordial Elixir.

Each fluid drachm contains one grain of Pyrophosphate of Iron.

Children, one-half to a teaspoonful before eating. Adults should take a tablespoonful as often.

Elixir Bromide Potassium.

Each fluid drachm contains ten grains of Bromide of Potassium.

Adult dose, one or two teaspoonfuls.

Elixir Calisaya Bark, Iron and Bismuth.

This Elixir contains one grain of soluble Citrate of Bismuth, in each teaspoonful of the Ferrated Elixir of Cinchona.

Adult dose, a dessertspoonful.

Elixir Calisaya Bark, Iron and Strychnia.

Each fluid drachm contains five grains Calisaya Bark, two grains Iron, one-fiftieth grain Strychnia.

Adult dose, one teaspoonful.

Wine of Wild Cherry Bark.

Each fluid drachm represents twenty grains of the bark, collected at the proper season.

Adult dose, one teaspoonful.

Ferrated Wine of Wild Cherry Bark.

Each fluid drachm contains twenty grains of the Bark, two grains Iron.

Adult dose, one teaspoonful.

Elixir of Pepsin and Bismuth.

Wine of Pepsin and Soluble Salt of Bismuth.
Adult dose, one or two teaspoonfuls.

Tasteless Cod Liver Oil.

Cod Liver Oil prepared in an emulsion.

Adult dose, a tablespoonful three times a day. Children in proportion to age.

Tasteless Cod Liver Oil. Ferrated.

Our tasteless Oil, with one grain of Pyrophosphate of Iron in each fluid drachm.

Preparations of Beef and Wine.

Owing to the type of debility which characterizes the great majority of the diseases now prevailing, the tonics or strength-giving remedies have assumed an increasing importance of late years. We have paid much attention to preparations of this class, and desire to bring to the notice of the medical profession three articles, which we are confident will be found of the utmost value. In fact, we are in the receipt of the strongest testimony to their efficiency from those who have already used them.

The peculiar feature of these preparations is, that they combine nutriment with stimulus. In the majority of cases, along with failure of strength, and indeed as one cause of that failure, there is inability to digest nourishing food. Hence it is very desirable to furnish nourishment in a form acceptable to the stomach, at the same time that we excite this organ to do its duty.

On the other hand again, in some cases alcoholic stimulus, although needed, is ill-borne if given by itself, producing headache, excitement, and other symptoms which may be avoided by the addition of nutritious substance, either with or without a bitter tonic or iron.

Wine of Beef and Iron.

VINUM CIBI ET FERRI.

In this preparation are combined the stimulant properties of wine and the nutriment of beef, with the tonic powers of iron, the effect of which on the blood is so justly valued. For many cases in which there is pallor, weakness, palpitation of the heart, with much nervous disturbance, as, for example, where there has been much loss of blood, or during the recovery from wasting fevers, this article will be found especially adapted.

Each tablespoonful contains the essence of one ounce of beef, with two grains of citrate of iron, dissolved in sherry wine.

With a view to making the article more palatable, a portion of the beef is in the first place partially roasted, as experience has shown that it is better borne by the stomach, and can be administered for a longer period when this is done.

Adult dose, one tablespoonful between meals, and when suffering from fatigue and exhaustion.

Dose for children should be reduced according to the age.

Elixir Bromide of Sodium.

Each teaspoonful contains ten grains of Bromide of Sodium.

Adult dose, one or two teaspoonfuls.

Wine of Ergot.

Strength, United States Dispensatory.

Elixir Valerianate of Strychnia.

Each teaspoonful represents (1-40) one-fortieth of a grain of Strychnia.

Adult dose, one teaspoonful.

Comp. Syrup Phosphate of Manganese.

Each teaspoonful contains one grain Phosphate of Iron, one of Manganese, and two of Soda.

Dose, one teaspoonful.

Wine of Pepsin.

Adult dose, one or two teaspoonfuls.

Solution Carbolic Acid.

Each fluid oz. contains forty grains of the Glacial Acid.

Syrup Superphosphate of Iron.

Each fluid drachm contains three grains of Phosphate of Iron, with an excess of Phosphoric Acid.

Adult dose, one teaspoonful immediately after meals.

Elixir of Bismuth.

This Elixir contains two grains of the Citrate of Bismuth in each fluid drachm.

Adult dose, one to

Syrup Chloral Hydrat.

Each teaspoonful contains five grains Crystallised Chloral Hydrat.
Dose, one teaspoonful to tablespoonful.

Wine of Beef, Iron and Cinchona.

VINUM CIBI ET FERRI CUM CINCHONA.

The admirable tonic and anti-periodic properties of Cinchona or Calisaya Bark have been for so many years past universally recognized, that they need not be insisted upon. In the above-mentioned preparation, which is especially adapted to cases of recovery from fevers, in this country so generally tinged with a malarial type, our Wine of Calisaya Bark, to which we have always paid great attention, is made the vehicle for introducing into the system the extract of beef, together with the citrate of iron. Hence, we claim for this article as a whole pre-eminent virtues, combining, as it does, the stimulant, nutrient, chalybeate, and tonic powers of its several ingredients.

Each tablespoonful or half ounce contains, dissolved in sherry wine, the essence of one ounce of beef, with two grains of citrate of iron, and twenty grains of Peruvian Bark.

Adult dose, one tablespoonful.

Wine of Beef.

In each tablespoonful of this preparation there is the essence of one ounce of Beef in solution in Sherry Wine. It is therefore a refreshing stimulant, the effect of which is not merely to quicken the circulation and impart a temporary excitement, but also to supply actual strength.

Syrup Lactophosphate of Lime.

Phosphate of Lime has been universally recognized as a remedy of great value in the various forms of Scrofula, in Phthisis, and in the diseases dependent upon defective nutrition.

The disappointment which frequently follows its employment, due most probably to an inability on the part of the system to appropriate the materials supplied by Phosphate of Lime, has led to a search for means to secure its absorption; and this has been best accomplished by its combination with Lactic Acid, in the form of a Lactophosphate of Lime.

M. Dusart, the eminent and conservative French physiologist, who, after long-continued and exhaustive experiments, has tested it thoroughly, is satisfied that it supplies the want recognized in the simple Phosphate, and believes that its definite action and powerful effect will soon cause it to rank with Bromide of Potassium and Hydrate of Chloral as one of the most valuable of the new preparations which have lately been brought before the medical profession.

Its use in the French hospitals demonstrates that it exceeds all agents tried in stimulating the functions of nutrition. All who have used it unite in advocating its special adaptation and value, when given to children and infants, where these functions are so often deficient.

We prepare this salt from the formula most approved by the French chemists, and manufacture from it a syrup pleasantly flavored.

Each teaspoonful of this syrup contains two grains Lactophosphate Lime. It is prepared with an excess of Lactic Acid.

The Lactophosphates are largely given to children and infants with happiest results.

Adult dose, dessertspoonful two or three times a day. Children a teaspoonful, and for infants according to age.

Elixir Pepsin, Bismuth, Strychnia and Iron.

This is prepared by the addition of one grain of Iron to each teaspoonful or fluid drachm of Elixir Pepsin, Bismuth and Strychnia.

Adult dose, one teaspoonful.

Elixir Taraxacum Compound.

Composed of Dandelion (fresh root), Wild Cherry and Gentian.

Adult dose, a tablespoonful.

Syrup Lactophosphate of Iron.

Each teaspoonful contains one grain of Lactophosphate of Iron.

Adult dose, a dessertspoonful. Children and infants according to age.

Compound Syrup Lactophosphates.

IRON, LIME AND POTASH.

This preparation contains one grain of Lime, half grain of Iron, and one fourth of a grain of Potash, in each fluid drachm.

Adult dose, one dessertspoonful immediately before or after meals.

Elixir of the Phosphates.

(CHEMICAL FOOD) WITH CALISAYA BARK.

This elegant preparation has the great advantage of combining the general tonic properties of Peruvian bark, a medicine which has, perhaps, stood the test of time more satisfactorily than any other, with the special virtues of the Phosphates of Lime, Iron, and Soda. These latter remedies address themselves more efficiently to the stimulation and strengthening of the nervous system, which invariably suffers in conditions of debility.

Not only theoretically, but experimentally, the Phosphates are found to be assimilated, and to supply to the brain and spinal cord elements which are needed for the due performance of their functions, and the want of which is made manifest by many of the symptoms of wasting diseases. They are here combined with the Calisaya in a form which admits of their administration for any desired length of time without offending the stomach, a quality which gives this preparation great value in many instances of defective nutrition.

Each pint represents the strength of one ounce of Peruvian Bark, and every tablespoonful contains one grain of freshly precipitated Phosphate of Iron, two grains of Phosphate of Lime, half grain Phosphate Soda, with slight excess of Phosphoric Acid.

Adult dose, a tablespoonful immediately after eating, in water or milk. Children should take one to two teaspoonfuls.

Plasters of Aconite, Belladonna, Arnica and Opium.

Spread on fine linen in rolls of one yard each. In the manufacture of these plasters we use none but the most reliable English Extracts.

Elixir of Bark, Iron, Pepsin and Bismuth.

Calisaya Bark, Ammonia Citrate of Iron, Pepsin and a soluble Salt of Bismuth.

Adult dose, a dessertspoonful.

Syrup Iodide of Lime.

Two grains Iodide of Lime in each fluid drachm.

Chemically Pure Carbolic Acid.

FOR MEDICINAL USE.

Put up in one ounce Bottles.

Pastiles of Chlorate of Potash.

STIMULANT, ALTERATIVE AND DIURETIC.

Recommended in low and morbid conditions; useful in affections of the Throat, Ulcerations, Croup, Mercurial Salivation, &c., &c. The Lozenges combining the local together with the constitutional influence of the salt, renders this form of administration preferable in affections of the Mouth and Throat.

Pure Inodorous Glycerine.

Manufactured by Henry Bower Philadelphia.

Elixir Valerianate of Zinc.

Each fluid drachm contains one grain of Valerianate of Zinc.

Liquor Pepsinæ,

SOLUTION OF PEPSIN.

This preparation of Pepsin, manufactured from the fresh stomachs of the pig without heat or the addition of alcohol, represents in a concentrated form the active properties of this much-used and highly esteemed medicinal agent.

Pepsin has rapidly gained favor with physicians, their actual experience having proven its great value as an aid to impaired digestion. We can confidently recommend our Solution of Pepsin to their attention as being agreeable and effective, and preferable in every way to pepsin in powder, as so often administered. As the solution is prepared from the moist and recently precipitated pepsin, we avoid the application of heat necessary in the dry pepsins sold. It enables us to add lactic acid to the solution, which supplies the necessary acid, and increases to a marked degree the efficiency of the remedy.

The menstruum we use is glycerine with acidulated water, and will keep for an indefinite time without change or loss of activity.

Dose, for an adult, a teaspoonful immediately after meals.

Syrup Lacto-Phosphate Lime and Pepsin.

Each fluid drachm contains two grains Lacto-Phosphate Lime and two grains Pepsin.

The above is an exceedingly valuable combination, as physicians will readily appreciate from the effect naturally expected of this combination.

Elixir of Citrate of Lithia.

Two grains in each tea-spoonful.

Elixir Bromide Calcium.

Each teaspoonful contains five grains Bromide Calcium.

Elixir Pepsin, Bismuth and Calisaya Bark.

Wine of Pepsin, with one grain of soluble Citrate of Bismuth and five grains Calisaya Bark in each fluid drachm.

Elixir Calisaya Bark.

IRON, BISMUTH AND STRYCHNIA.

Each dessertspoonful of this preparation contains the one-sixtieth of a grain of Strychnia, two grains of Soluable Citrate of Bismuth, with Peruvian Bark and Iron in same proportion as in our Ferrated Elixir of Cinchona. It has proved a valuable combination in many cases.

Adult dose, a dessertspoonful. For Children, graduate according to age.

Liquor Bismuth.

This solution contains two grains of the Ammonia Citrate of Bismuth in each fluid drachm.

Wyeth & Bro's Cod Liver Oil.

COMBINED WITH HYPOPHOSPHITES OF LIME AND SODA.

This preparation represents in a convenient form one of the most efficient and popular remedies in cases of a pulmonary character, with tendency to hemorrhage, loss of appetite, cough, and specially when attended with emaciation.

Directions, before taking, shake the bottle well, so as to mingle thoroughly the Hypophosphite Salts with the Oil. Adults should take a teaspoonful three times a day, and increase to a dessertspoonful in a week.

Elixir Valerianate Morphia.

Each teaspoonful contains one-eighth grain Valerianate Morphia.

Comp. Fluid Ext. Buchu and Pareira Brava

This fluid extract is composed of equal quantiti of Buchu, Pareira Brava and Collinsonia Canadensis.

Adult dose, one teaspoonful three times a day.

SPONGE TENTS.

For the Urethra, of every size and style, made of fine quality of sponge.

MEDICINAL PEARLS.

Pearl of Chloroform, Apiol, Oil of Turpentine, C paiba, Wormseed Oil, Oleo Resen Cubebs, Oils of C paiba and Cubebs, Oil Sandal Wood.

Elixir Corydalis Comp.

ALTERATIVE AND TONIC.

Corydalis Formoso, Stillingia Sylvatica, Xanthox lum Fraxineum, each eight grains, and one grain Iodi of Potassium in each fluid drachm.

Dose, one teaspoonful.

Dr. Jackson's Pectoral Syrup.

This preparation, which is made according to th prescription of Professor Jackson, has found much fav on account of its beneficial effects, as well as the emine source from which it originates. It is used as an expe torant in recent or chronic coughs, and as a palliative i Consumption, it has long been held in high esteem.

Directions, the dose for an adult is a teaspoonful, t be repeated every two, three, or four hours, as required

For children, the dose should be proportionately d creased.

Elixir Phosphate Iron, Quinine and Arsenic

So many physicians object to administering th above medicines in pill form, and experience in the mor decided action, when given in solution, has induced th preparation of this Elixir.

Each teaspoonful contains 1 grain Pyro. Phos. Iro Quinine, and 1-30 grain Arsenic.

Cod Liver Oil with Phosphate of Lime.

We earnestly invite the attention of physicians to this article, which will be found to answer a most important purpose as a remedy in the large class of wasting diseases.

One of the principal features in all these affections is the impairment or perversion of nutrition, the too rapid tissue transformation, and the want of certain substances essential to the organism. Especially is this manifest in the typical forms, scrofula in children, pulmonary complaints in adults. In these disorders, Cod Liver Oil acts as a fuel, maintaining animal heat. By adding to it the Phosphate of Lime, we supply not only a tonic to the nervous system, but an important ingredient in other tissues of the body. When there is an actual tuberculous deposit, this article promotes its most favorable result, cretification.

Children and invalids, however fastidious, can take our Cod Liver Oil, prepared in the form of an emulsion, without difficulty, being pleasantly flavored and perfectly disguised; but *physicians will readily understand that the real reason why very delicate persons can digest our emulsion of Cod Liver Oil is that the oily particles are without chemical change broken up and incorporated with an agreeable solution, used as a vehicle in the process of manufacture. The molecular condition of the Oil is entirely changed; and it is in consequence more quickly and readily digested when taken.*

We therefore feel the utmost confidence that this remedy will not disappoint the expectations of those who employ it, and offer it as a valuable addition to the resources of the profession against the disorders which are in this country the most numerous and the most formidable which they are called upon to combat.

Each ounce of the mixture contains sixteen grains of the Phosphate of Lime, so that the usual doses of Cod Liver Oil may be given, whatever may be the age of the patient.

Experience has proved that children and adults unable to take Cod Liver Oil as usually administered, find no difficulty in taking and retaining this preparation.

Adult dose, a dessertspoonful, to be increased to a tablespoonful. Children in proportion to age.

The bottle should be well shaken before giving each dose.

Lactophosphate of Lime and Cod Liver Oil

We beg to call the attention of the medical pr fession to the above article, which will be found of th utmost value in the very large class of cases characte ized by defective nutrition. Of these diseases, the mo familiar types are scrofula in children and phthisis i adults. Emaciation or flabbiness of the limbs, palle want of muscular and nervous energy, and sometime softening of the bones, are symptoms more or less marke in every instance. Food, if taken with any appetit seems to fail of being properly assimilated in the system Especially in children, this want of tone makes itse apparent by contrast with the normal elasticity an activity of their time of life. Under these circum stances, the great object of treatment is to preven further loss of substance, and to supply the requisit material to make good the waste of tissue in such form that the system can readily take it up.

Children and invalids, however fastidious, can tak our Cod Liver Oil, prepared in the form of an emulsio without difficulty, being pleasantly flavored and pe fectly disguised; but *physicians will readily understan that the real reason why very delicate persons can dige our emulsion of Cod Liver Oil is that the oily particle are without chemical change broken up and incorporate with an agreeable solution, used as a vehicle in the pro cess of manufacture. The molecular condition of th Oil is entirely changed; and it is in consequence mor quickly and readily digested when taken.*

On chemical grounds, the phosphate of lime, pre pared for assimilation by combining it with lactic acid and reinforced by the addition of Cod Liver Oil, woul naturally be expected to meet the needs of the organis thus affected; and experience shows that this belief i correct. The rapid improvement in flesh and strength the diminution of waste of tissue for the purposes c maintaining heat and chemical action, are such as t justify our most sanguine hopes. Such results cann be looked for or obtained by the exhibition of either c these remedies alone, but are the natural effect of givin them in combination. We might indeed claim for the a rank among foods, rather than among medicines.

It is therefore with the utmost confidence that w ask physicians to give this preparation a fair trial i their practice.

The adult dose, a tablespoonful, contains two gra of the Lactophosphate of Lime, with fifty per ce Cod Liver Oil.

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Superior Fluid Extracts,

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ALWAYS UNIFORM AND RELIABLE.

These Extracts are prepared by cold re-percolation, thereby avoiding the use of heat and exposure to the air, which impair those active principles in which the virtues of most vegetable remedies consist. By experience we have determined the greater efficacy of certain menstruums in the exhaustion of the virtues of different drugs; in some, glycerine being a valuable adjunct to the alcohol—in others, objectionable.

Each Drug is carefully studied by itself,

and great care is taken that each lot of the same extract should be uniform with the preceding, the specific gravity, where the same menstruum is used, being a test. The process that we employ has been endorsed by the leading Pharmaceutical journals, and by our best Chemists, and every thinking Pharmacist will readily acknowledge the danger of applying heat to medicinal drugs.

We have been much gratified by the receipt of a number of letters from Physicians and Pharmacists, speaking in the highest terms of the STRENGTH and *reliability* of our Fluid Extracts, for they convince us that our efforts to elevate the standard, or rather to maintain the *proper* standard, of these important Pharmaceutical Preparations have been successful. We shall always endeavor to merit the reputation we have earned.

For the time being, we have met the most important needs of our Book of Formulas, by printing upon each label of our Fluid Extracts the formulas for Tinctures, Syrups, Infusions, &c., and will take more time to perfect our manuscript.

Yours respectfully,

McKESSON & ROBBINS.

The above are for sale at our prices in currency, by

JOHN NEWMAN & BENNETT,

Sole Agents for Pacific Coast,

P. O. Box 1369. **411 Washington Street, S. F.**